

Experiences and Meaning of the Aquatic Environment
for Individuals with Physical Disabilities

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ABSTRACT

This study examines the experiences and meaning of physical activity in the aquatic environment to enhance social, cultural and political understanding of its impact in the lives of individuals with physical disabilities. Interviews, lived experience descriptions and artifacts present an explanation of the felt sense of their bodies as they engage in swimming or scuba diving.

Combining written, verbal and visual descriptions generated by informants provides a detailed account of the unique qualities of physical activity in the water for those with physical disabilities. Participants' descriptions highlight that context is an important aspect of physical activity among individuals with physical disabilities through discussion of motility and the role of the lived body. Aspects of the aquatic environment create a setting that facilitates forgetfulness of the lived body's presence. Instructors and participants alike will benefit from learning the difference between the object body and the lived body, listening to the body's voice as they participate in physical activity.

ACKNOWLEDGEMENTS

Wow! Two years already? Time has just flown by! It seems like yesterday that I arrived at Brock for my Orientation. I remember sitting in the pond inlet feeling overwhelmed by all the information thrown our way, looking around the room at all the other students wondering what I'd gotten myself into.

Luckily, I was blessed with a thesis supervisor like Maureen who was there whenever I needed her reassurance and wisdom. I would like to take the opportunity to let her know that my experience at Brock would not have been the same without her! I will never forget my initiation to life at Brock through the Autism camp. I will miss our weekly meetings over coffee (which I began drinking during the third and final day of the ISW!). Thank you for allowing me the opportunity to pursue a Master's degree and supporting my decision to embark on a project of this magnitude. Jae, I thank you for encouraging my growth as a researcher and instructor. I am grateful for our chats as well as the reassurance and the encouragement you provided. Phil, I thank you for our discussions where you challenged my ideas and allowed me to learn the value of standing up for my work. You have helped me prepare myself for future battles. To my parents, fiancée and puppy, thank you for your moral support through the roller coaster of emotions I experienced in this process. You provided reassurance through all the tears and frustrations without hesitation.

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CHAPTER ONE- INTRODUCTION

Without leaving the comfort of my study at home, I gather relevant journal articles online from the Brock Library Catalogue. As I progress through the research process, the hardware and software components of my computer unite to produce a legible version of my thesis document. Although, busy schedules and global travel make it difficult to arrange face-to-face meetings, e-mail communication serves as a convenient way to update my thesis supervisor. When my physical presence is required on campus, I find myself frustrated by unexpected traffic congestion, repeated red lights, and the related loss of valuable time. Each step of this process reflects the disembodied lifestyle associated with the Age of Technology.

Science and technology hold a profound influence on the disembodied way of life among many cultures (Leder, 1990). Breakthroughs in both science and technology produce mechanical devices to alleviate the body from exertion and damage. These breakthroughs have led the pace of communication, transportation and many other aspects of modern lifestyles to increase. Unfortunately, with these changes in the pace of modern lifestyles comes a decreased awareness of the body in everyday activities (Leder, 1990).

Social conditions hold a great deal of influence on the relationships that are created with the body. Current North American lifestyle represents a prime example among modern cultures using advances in technology and science to shape the relationship and understanding of the human body. The medical profession is in a position of authority to shape this relationship by saving lives and extending life

expectancy. The pace of life serves as a direct reflection of how science and technology influence the lived experience the human body (Wendell, 1996).

The limitations of the body are apparent by observing everyday routines at home, at work and in physical activity. Among the able-bodied segment of the population, the current pace of the modern lifestyles is easily forgotten. Unfortunately, this rapid pace of life is now a major source of disability causing increased damage to the body due to improper nutrition and lack of rest (Wendell, 1996).

Lifestyles in fast-paced cultures with attention focused in so many directions make it easy to overlook the role played by the body. Performing simple tasks or going about everyday routines, the body mediates the interactions in the social and physical environment. Through the process of growth and development, individuals are made aware of their body's strengths and limitations. Once they have attained the physiological milestones their focus shifts away from their body. When the body remains "in tune" with the environment, the body's voice remains mute. When the body loses its equilibrium with the environment, its voice is heard loud and clear announcing its presence through experiences such as pain, fatigue, illness and disability (Gallagher, 1986).

My own life story is a reflection of that very statement. As an individual with an acquired disability, I know all too well that, as an adolescent I ignored the importance my body played in my daily routines. One day I was able to play outdoors, ice skate, jump rope, and engage in a variety of schoolyard games during recess. The next day I was a stranger in my own body because of an accident. Following the advice of my physiotherapist, I traded riding gear for a swimsuit, and headed off to the public pool.

That's where I first experienced the impact of the aquatic environment as I learned how to re-gain control over my body. From the moment I entered the water I enjoyed a sense of freedom and independence. My experience in the water allowed me to develop a sense of comfort with my body.

Keeping my own history in mind helped me understand the experiences of others within the same context, most notably through the group of swimmers with physical disabilities (SWAD) I coached during my undergraduate studies. Each swimmer enrolled for different reasons. My role as a coach allowed me to observe how the aquatic environment was much more than a venue for physical activity. The aquatic environment afforded each swimmer a means to develop body awareness, and establish their identity as an individual with physical disability.

Among Canadians, 56% of adults lead sedentary lifestyles. The primary reason for low levels of physical activity is a general lack of knowledge of current physical activity guidelines among Canadian Adults (CFLRI, 2004). Physical activity is an important issue as it is an effective strategy to combat obesity among adults.

Obesity and sedentary lifestyles are among the leading causes of death (CFLRI, 2004). Research indicates that prevention is effective when all segments of the population are encouraged to increase their levels of activity. Education on healthier lifestyle choices is another aspect of this effective strategy for prevention. While this suggestion may be simple for able-bodied segment of the population, increasing activity levels among individuals with physical disabilities is a complicated matter.

In current context, 3.6 million Canadians (or 12.4% of the population) have a disability (Statistics Canada, 2001). Individuals with disabilities represent a minority

group among the Canadian population. Among Canadians, physical disabilities represent the most prominent form of disability (Statistics Canada, 2001).

In an effort to increase physical activity among the general population, the Government of Canada created physical activity guidelines for seniors, adults, youth, and children. Individuals with physical disabilities represent one group where the government has failed to offer any physical activity guidelines. Unlike in other groups, the government has noted some additional complications in producing universal guidelines for physical activity. One explanation for the challenge of producing physical activity guidelines for individuals with disabilities is the problem of dealing with additional barriers to physical activity such as the need for adapted equipment, program availability and accessible environments (Martin-Ginis & Hicks, 2007).

The aquatic environment has the amazing ability to accommodate physical activity for participants with diverse levels of physical fitness and motor skills. In this study, the aquatic environment is defined as any body of water such as a pool or a lake in which 50% or more of the participant's body is submerged under the water's surface during physical activity (such as swimming or scuba diving). This definition includes the physical space of the aquatic environment as well as the functional space of the aquatic environment including the pool deck or shoreline. The flexibility of the aquatic environment provides diverse programming options to participants with a wide range of skills.

The objective of this study was to examine the meaning of physical activity in the aquatic environment among individuals with physical disabilities. Focusing on gathering an insider's perspective from those involved in swimming and scuba diving helped to

develop an understanding of the benefits of both the natural and artificial aquatic environment. Research questions guiding this study sought to reveal the ways that individuals with physical disabilities describe the felt sense of their bodies as they participate in physical activity within the aquatic environment.

Understanding of the phenomenon under study was obtained through a phenomenological approach using the language provided through the descriptions and experiences that participants shared. Audio recordings providing first person narratives, visual artifacts and in-depth interviews worked together to produce a more robust understanding of the meaning of physical activity in the aquatic environment for individuals with physical disabilities. A detailed picture emerged by pursuing multiple perspectives offered by parents, instructors, and participants occupying different vantage points in either an adapted swim or scuba program. Armed with visual, audio and written descriptions of the meaning of physical activity in aquatic environments, participant narratives provided a detailed understanding of the felt sense of physical activity in aquatic environment for individuals with physical disabilities, allowing the body's voice to return to a position of authority (Connolly, 1997).

The intent of this study was to draw from established knowledge in disability studies, health promotion and adapted physical activity. Discussion of relevant literature is arranged and presented through the following topics: theoretical models of disability, disability & identity, obesity & disability, swimming and scuba diving.

The images and stories participants shared acknowledge the dynamic relationship between body and self (Toombs, 1995). Understanding the impact of experiencing a broad range of contexts for physical activity is important to increasing the level of

physical activity among all segments of the population. This study concentrates on examining the experiences of individuals with physical disabilities within the aquatic environment that could lead to development of suitable programming for this population.

Activities within the aquatic environment are readily available in many communities worldwide. The aquatic environment holds a great deal of potential to address the physiological and psychological needs of individuals with physical disabilities. Research examining the meaning of physical activity within this particular context using an insider's perspective remains particular and could benefit from further research using both quantitative and qualitative investigations.

Theoretical models of disability

Discussions on the topic of disability are complex due to the attention received from diverse academic disciplines. Sociology, Medicine and most recently Disability Studies each attempt to develop an understanding of the labels attached to disability. Currently three theoretical perspectives offer insight into the definition and significance of disability in Western cultures. Each offers a unique perspective on the processes that are used to present disability as an issue of biological, social and psychological relevance.

The Medical Model

From a historical perspective, the Medical model (also known as the categorical model) played a large role in shaping the social view of disability in North America. This model presented the initial link between disability and the body. Accordingly, disability is defined as the result of a physiological anomaly limiting the body's functional abilities to complete everyday activities in the world (Sherrill & Yilla, 2004).

Medical professionals are revered as they undergo many years of academic training. This training places doctors in a position of cognitive authority in western cultures (Wendell, 1996). One aspect of medical training aims to build their knowledge of the human body. As experts on the body and its varying states of existence, doctors are placed into a position of power. As experts on the human body, they shape the definition of disability. Professional practices among medical professionals have evolved.

Advances in science and technology created a shift in medical practice. Rather than using patient narratives allowing for first person descriptions of the lived experience of illness, the use of the corpse to advance medical knowledge promoted the use of third person language (Leder, 1992). The corpse continues to uphold the use of third person language. Medical professionals begin their training working with an inanimate object (the corpse) or in laboratories examining inanimate specimens (tissue samples removed from the body) (Leder, 1992).

Medical professionals may over-use this power by modifying this definition to suit their financial interests creating a demand among the general population for their services. This cognitive authority derives some of its power through the myth of control. Accordingly, the myth of control fuels the belief that it is possible by means of human actions to gain control over the body (Wendell, 1996). This control can be used to obtain a body that exhibits characteristics considered to be desirable and in the prevention of illness, disability and death. The myth of control fosters the false belief that it is possible to learn to control the body and use this knowledge to eventually “cure” all forms of pain, illness and disability.

The cognitive authority of medicine and myth of control are both sources of influence fuelling alienation from the body and bodily experiences. Medical professionals communicate using third person language to describe the body (Wendell, 1996). Rather than using first person language, allowing patients to present aspects of the lived experience of their symptoms, doctors insist on using third person language to describe the body. Removing a personal, subjective language to describe bodily experiences leads to objectification of the body (Tremain, 2006). Using third person language, the body is an object that can be manipulated and transformed using appropriate pharmaceutical and medical interventions. Technical language used by health professionals represents another source of power in shaping the definition of disability.

An unfortunate consequence of the medical vocabulary is the challenge to express the lived experience of illness or disability accurately through interaction with medical professionals. When an individual lacks any visible symptoms or is unable to describe her symptoms using medical language available the accuracy of her bodily experience is subject to epistemic invalidation (Wendell, 1996). The use of this third person language grants medical professionals the right to deny the existence of disability or “non-discrete pathologies”. Current understanding of the definition of disability in North American cultures present disability as an abnormal state of existence for the body. Doctors call upon the physiological status of the body to assist in classification of the members of the population into different categories.

In order to prevent epistemic invalidation the medical profession must be able to observe, and understand lived experience of illness/disability using medical language.

When unable to meet either criteria, epistemic invalidation of individual and her bodily experiences leads to social abandonment.

Social abandonment from significant others, government, and other forms of support represents another consequence of the cognitive authority of medicine. When medical professionals are unable to make a diagnosis or use medical language to explain the symptoms that she experiences, then she is not exempt from social expectations in terms of pace and performance in her everyday activities (Wendell, 1996). Medical professionals call upon their power to determine what criteria to use to define what warrants placement into the appropriate category of able-bodied or disabled.

Bio-power is the form of power that upholds the myth of control and the cognitive authority of medicine in North American Cultures. Bio-power is the use of power and knowledge to manage challenges or problems presented by a particular group (Tremain, 2006). Through their position of power as cognitive authorities on the body, medical professionals exert bio-power. The consequences of this cognitive authority shape social relationships and understanding of the modern body. This understanding is created through medical examinations and medical terminology that treat the body as an object.

One aspect of this bio- power determines the group that occupies a position of authority to enforce disciplinary practices that create docile bodies (Tremain, 2006). In Western cultures, the medical profession is a prime example of a profession in a position of power to create docile bodies. Medical professionals enforce disciplinary practices that are learned through their training. These practices take actions to restrict knowledge about the body among the general population (Tremain, 2006). The dichotomy created by

the medical model of breaking the population into two distinct categories of disabled vs. able-bodied creates animosity between these groups in the general population.

Doctors have and continue to exert this power in presenting disability as a negative label when they determine able-bodied/ able-mindedness is the natural and desired condition of the body (Hayes & Hannold, 2008). Any body that deviates from “Normal” desired appearance/ state of existence is focused upon as a docile body. The cognitive authority of the medical profession plays a key role in shaping social views labelling the disabled body as a docile body.

The language associated with the medical model’s definition of disability treats the disabled body as a docile body by assigning individuals with a disability to play a specific role. Disability and those with physical disabilities are associated with a body that is labelled as un-healthy or “sick”. When assigned to play the “sick” role, they are placed into a position where they are believed to be weak and unable to care for themselves. This is a common misconception about individuals with physical disabilities. In the case of disability, medical professionals use their bio-power to provide guidance in actions that are able to “cure” disability to restore the body to a state of good health (Oliver, 1996). The sick role and the language associated with the medical model presents disability as a temporary physical state. Eventually advances in medicine will make it possible to eliminate all forms of disability using appropriate treatment protocols.

Members of the health professions assess the “cost” of disability as a negative impact to society in general. Due to the influence of the myth of control, individuals with physical disabilities and medical professionals are urged to reduce the impact of disability on society. To move beyond this “sick” role, individuals with physical disabilities

undergo a great deal of pain and discomfort associated with treatments that serve as a means to minimize the physiological prominence of disability on their body (Oliver, 1996). Society justifies the consequences such as the discomfort individuals with physical disabilities experience because of these treatments against the potential benefits of improved health and the quality of their lives.

Unfortunately, the medical model fails to present a complete understanding of disability. This places a great deal of power in the hands of medical professionals as they are assigned the administrative task of organizing the criteria to define the difference between the able-bodied and disabled (Hayes & Hannold, 2008).

The medical model ignores the potential impact of individual choices. Within the social minority group of the disabled there will be a hierarchy. An individual will sit atop this hierarchy if she is able to minimize the visibility of her disability by gaining control over her body (Wendell, 1996).

Another challenge the power of the medical model is through the individual lifestyle choices that she has made (Swain & Cameron, 2002). Taking an active role, an individual with a physical disability is able to challenge the opinions of authority figures. This challenge is visible through the choice to refuse to rely on assistive devices to normalize her bodies and its functional abilities as she goes about her daily routines.

The Social Model

As time passed, many disciplines began to challenge medical professionals and their power to shape the definition of disability. The social model of disability emerged as an alternative to the medical model in the 1980s. Rather than defining disability as an individual phenomenon, the social model presents disability as the result of the current

social structure (Sherrill & Yilla, 2004). The social model acknowledges the power that language holds in shaping social values and beliefs. Using language, the social model creates a distinction between the concepts of impairment and disability.

Impairment is the term associated with any physiological difference in the body. These physiological differences can be noted by making comparisons between an individual's functional abilities and social expectations of performance in various activities. The body is impaired when it lacks a particular component. If the body is not missing any of its parts then it may also be impaired due to its current state of existence (Swain & Cameron, 2002). Presenting a separate definition of impairment, the social model removes the significance of the body in shaping the definition of disability.

According to the social model, disability is no longer an individual experience tied to the body. Disability is created as an individual experiences some form of restriction in their opportunities to participate in certain forms of activity. Society creates disability as it fails to accommodate the needs of all individuals excluding certain groups of people from participating in social activities (Oliver, 1996). The social model sees that it is the social structure in society that creates disability, as it causes individuals with disabilities to be excluded from certain social activities.

The social model served to unite individuals with disabilities as a group through the distinction made between impairment and disability. In this sense, disability is no longer something that an individual experiences alone. The model spurred the growth of a disabled community working as activists towards eliminating barriers preventing equal opportunities to participate in social activities (Shakespeare, 2006). The disability rights movement saw that individuals with disabilities shared a common experience as a

minority group. As members of this group, they have experienced social oppression through stereotypes and prejudice created by members of society with the power to make decisions and shape social values.

Hegemony is a major source of power in North America in shaping dominant social values. Individuals who are in positions of power take the lead in making decisions that shape the characteristics (gender, sex, age) that are undesirable and associated with inferiority (Charlton, 2006). These characteristics are not stable and change as a reflection of the individuals that are placed into positions of power. The social model presents individuals with disabilities as members of society who reflect undesired characteristics. As members of a minority group their needs are often overlooked. In the case of disability, as a group they experience alienation because of dominance of the ablest point of view (Linton, 2006).

The rejected body represents an explanation of the alienation individuals with disabilities experience. The rejected body is defined as any aspect of bodily life (illness, disability, death), appearance and experience (pain, fatigue) that are ignored (Wendell, 1996). Just as the definition of disability evolves, the images associated with the ideal state of the body and cultural ideas about the rejected body evolve. Alienation represents the influence in shaping social values and attitudes towards individuals with disabilities and the rejected aspects of the body.

The downfall of the social model is the dichotomy it creates in distinguishing disability from impairment. Defining disability as social phenomenon, the social model implies that the physical aspect (impairment) is not an issue (Hughes & Paterson, 1997). This dichotomy presents the greatest problems to the progression of the disability rights

movement. Advocating that society work to remove all barriers is a false- belief as it is impossible to achieve a barrier-free world (Shakespeare, 2006).

One factor the social model does not take into account is the impact of personal choices. Adults are not immune to the social barriers they encounter. As a group, they are at a phase in their lifespan where they are more independent. They are able to minimize the impact of material barriers as they have either accumulated more resources, or society has provided them with access to more organizations to assist them in minimizing the impact of barriers to their lifestyle.

The Lived Body Model

One final theoretical model on disability, the lived body model presents a unified approach to understanding disability. The lived body model acknowledges that the body plays a part in shaping the experience of disability (Hughes& Patterson, 1997). While the medical model states that disability is primarily physiological and is tied to the body, the social model states that disability is primarily a social phenomenon that is tied to social values, which overlook the needs of a certain segment of the population. The lived body model considers both play a part in shaping disability.

The lived body represents the unification of the physiological and psychological aspects of the body which shapes all experiences in the world (Gallagher,1986; Toombs,1995). More than an object in the world, the lived body represents a unique point of view in the world (Toombs,1992). The lived body is characterized through being-in-the-world allowing an individual the opportunity to interact with her surrounding environment (Toombs,1992). Beyond this interaction, the lived body is also characterized by intentionality representing an individual's attentiveness to the environment.

Intentionality links the body with the possibilities for actions or movement in the environment (Toombs,1992).

Typically the lived body and its role in shaping all interactions in the world occurs below conscious awareness. All information provided by the lived body is accessed through reflection on past experiences. When the lived body and its activities are hidden from conscious awareness the body is in an ecstatic state (Leder,1990). Among the general population, the lived body is experienced through this ecstatic state. Accordingly the lived body remains hidden from everyday experiences until it is brought to attention (Gallagher, 1986). Typically pain, hunger, fatigue are all examples of phenomena that temporarily call the lived body to attention. Illness and disability are two examples where the lived body announces itself and is present in everyday activities (Leder,1990).

Among individuals with physical disabilities, the body becomes the focus of their attention. The body and its limitations are always kept in mind as they negotiate the environment (Toombs,1992). An alternative understanding of the inescapable presence of the lived body among individuals with disabilities is the un-homelikeness they experience in the world. A break down in the tool-structure (the body) related to self causes individuals with physical disabilities to experience the world through an un-homelikeness in the world (Stahndal,2009). Un-homelike experience of the world experienced by individuals with physical disabilities is caused by limited possibilities for movement in the world.

The lived body model combines elements of the medical model which point to the role of the body as well as the influence of the social model acknowledging the role of social values in shaping the experience of disability. Another means of understanding

this interplay is through the notion of motility. Motility is the ability or possibilities for movement in the world (Leder,1990). The possibilities for movement influence all interactions with the environment and can be augmented using tools or technology. Individuals with physical disabilities can use mobility aids and assistive devices to open up additional possibilities for interaction in their environment (Toombs, 1995).

While the medical model links disability to the body and its physiological condition it does not see social values involved in developing a definition of disability. The social model uses language to create a distinct difference between impairment and disability. While impairment remains linked to the body and in the realm of health professions, disability is seen to be a socially created phenomenon.

Both theories offer us a unique way of examining disability and its influence on her experiences in diverse social institutions (school, work and recreation) presenting disability as either an individual or a social occurrence. Due to the focused definition of disability, each of these models presents an incomplete picture of the lived nature of disability in North America.

The lived body model emerged as a result of the downfall of the medical model noting that the body of a living being has essential structures that are impossible to grasp through language/ concepts used to describe inanimate objects (Leder,1992). Accordingly, the lived body is the body that is present in our everyday experiences and activities in the world. This body is absent from our conscious awareness in it's natural state accessed through reflection on past experiences in the world (Leder, 1990).

The lived body model defines disability as the way that an individual can interpret the meaning of her experiences as she engages in various forms of activity while out in

the social world. Individuals with disabilities experience these activities through their bodies as they interact with others in different social contexts. Each individual will interpret the meaning of these interactions as a component of her own identity (Hughes & Patterson, 1997). The body is the means that allows an individual to perform these activities and acknowledging that she is responsible for shaping the meaning of her own experiences in the world.

Both the body and the social structure have an influence on the definition of disability. This definition is unique to each person. They each experience the world in a different way through the choices that they make as well as through the different ways that they will use their bodies as they interact with their surrounding environment.

While the social model uses language to separate impairment from disability, the lived body model sees the body as the site where the meaning of both words intersects. Impairment represents the physical/outer component of the body. Disability represents the social/invisible components of the body. Both the outer and inner aspects of the body will influence an individual's experiences and perception of the "felt world" (Hughes & Patterson, 1997). Rather than presenting the role of the social context and the body as two dichotomous categories influencing disability, the lived body model considers both as individuals perform activities, which they interpret from their own point of view. Each individual with a disability will experience different activities and shape their experiences in these particular contexts from their own points of view, thus they will create a contextualized and embodied definition of disability.

Based on the role of the individual in developing the meaning of disability, the lived body model may be helpful in examining the experiences of an individual with an

acquired disability. This model offers the potential in exploration of the role of disability in the process of forming identity. The unique feature of this model is that it considers the meaning of disability is shaped by different contexts and may have a great deal of potential in examining the meaning of experiences in different sport and leisure activities.

Purpose & Research Questions

Purpose

The purpose of this project is to develop an understanding of the lived experience and derived meaning associated with physical activity in the aquatic environments to enhance social, cultural and political understanding of its impact in the lives of individuals with physical disabilities.

Research Questions

How do individuals with physical disabilities describe the felt sense of their bodies in aquatic environments?

How do individuals with physical disabilities construct meaning out of the lived experience of their bodies in aquatic environments?

Sub-Questions

How does the aquatic environment influence the experience of embodiment for individuals with physical disabilities?

What is unique about their experiences in the aquatic environment versus other venues for physical activity?

What are the images associated with meanings derived from physical activity in the aquatic environment and their influence on the identities of individuals with physical disabilities?

CHAPTER 2: REVIEW OF LITERATURE

Disability & Phenomenology

The commentary outlining the theoretical models of disability provided in the introduction to this paper drew arguments from the voices of three authors: Wendell, Leder and Toombs. Each author provides a different perspective in their arguments on the role of the body in disability.

Susan Wendell's voice emerges prominently in association with the consequences of cognitive authority of medicine. She notes three major consequences of the medical model are alienation/objectification of the body, epistemic invalidation and social abandonment (Wendell, 1996). She acknowledges that the medical model is influenced by the myth of control which guides actions of the medical profession to learn to control the body and "cure" all forms of disease and disability (Wendell, 1996).

Wendell argues that the medical model is inadequate to provide an accurate understanding of disability. She draws from her own experiences as a woman living with an invisible disability (Chronic Fatigue Syndrome). Writing from her first hand experiences she provided a narrative outlining the alienation and objectification of her own body as a result of an acquired disability. Sharing examples from her interactions with medical professionals before her diagnosis, she illustrates the impact of epistemic invalidation. Limited to the use of third person language to explain her symptoms, Wendell found it challenging to secure a diagnosis (Wendell, 1996). The inability of medical professionals to detect any physiological or visible symptoms to match her descriptions illustrates the power of the medical model in shaping the definition of disability.

Drawing from personal experience, Wendell saw a need to develop a new theory of disability that addressed issues about the body created by the medical model and oppression created by the social model. Calling upon her background in feminism, she consulted the literature in disability studies to illustrate how feminist theories could advance social understanding of the concept of disability.

The second significant voice in addressing the theoretical understanding of disability is Drew Leder. With training as a medical doctor as well as a PHD in philosophy his writing addresses the issues created through current practice in training medical professionals.

Traditional approach to training begins through dissection of the inanimate corpse to shape understanding of the human body. Medical terminology serves as a reflection of the starting point using third person language, which equates the body to an object among others in the world. From his perspective as a medical practitioner, Leder outlines the benefit of the lived body model to expand the vocabulary used to describe the lived experience of illness/disability (Leder,1992).

In the *Absent Body*, Leder uses phenomenology and philosophy to highlight the dilemma of the human body. The human body differs from other objects in the world as it is always present and inescapable (Leder,1990). While an individual can remove objects that create barriers to reaching a desired goal, it is impossible to remove the body when it presents itself as a barrier to attaining this goal.

In contrast to the body's inescapable presence as an object in the world, the role of the body is experienced as absent/ecstatic. Despite the role of the body in shaping understanding of the world it would be challenging to engage in any actions if it were the

constant focus of attention (Leder, 1990). Using a phenomenological point of view Leder explores why the body recedes from attention despite its role in mediating all action and awareness of the world. To illustrate the contrasting experience of the lived body between the able-bodied and individuals with disabilities, Leder highlights the conditions such as pain, illness and disability in which the lived body is at the centre of attention.

The final author whose voice added to the discussion of the lived experience of disability in support of the lived body model was S. Kay Toombs. Drawing from her own perspective as a woman living with Multiple Sclerosis, she illustrates the role of her body and the unpredictable nature of her disability in shaping her experiences in the world. Toombs provides strong arguments on the relevance of phenomenology to advance understanding of the lived experience of illness and disability.

Drawing examples from her own experiences negotiating environments, she uses the terms motility and anchoring to explain the subjective experience of space. Motility is a term used to describe the body's capacities for movement in the environment resulting in the creation of a new embodied reality (Guthrie & Castlenuovo, 2001). Individuals with physical disabilities experience limited motility. In the case of those with progressive disorders such as Multiple Sclerosis, Parkinson's disease or Alzheimer's disease the possibilities continue to decrease. With these changes, the body becomes the focus of attention (Toombs, 1995).

Individuals with physical disabilities must always keep their bodies and their limitations in mind as they interact in the social and physical environment. The most profound influence of the body and its limited motility is noted through the loss of upright posture and changes to locomotion (Toombs, 1992 *).

In relation to motility, anchoring is experienced in relation to changes in motility. Anchoring represents a certain situatedness in the world (Toombs, 1995). Typically locomotion causes an individual to experience freedom to move about in space, opening up possibilities for action in the world. Among individuals with physical disabilities any changes to mobility cause a change to the spatial relationship with the environment. This change in the possibilities for movement cause them to be anchored “here” while something that was previously thought to be “near” before the use of a mobility aid is now considered to be “far” (Toombs, 1992). Architecture and design of the physical environment are also involved in anchoring. The slope of a ramp, the number of steps and the “gaze” of others as they struggle to negotiate the physical environment outline the importance of the lived body in shaping the experience of disability.

Disability & Identity

The three theoretical models of disability outlined the diverse sources that influence the definition of disability. Just as these theoretical models evolved, the definition of disability has continued to evolve accounting for the influence from diverse sources. Identity is among the complicated components of psycho-social development. Identity is defined as self-knowledge of unique abilities and roles which influence our thoughts and actions (Sherrill, 2004). Identity is not passively accepted by individuals. There are two sources shaping the definition of disability in North American Cultures: the government (those in a position of power) and social norms (Wendell, 1996).

The government represents one group that is in a position of power in North America. Their chief influence of this power is noted through the allocation of resources. Working in co-operation with the medical profession, the government uses diagnosis to

guide the support provided to an individuals with a disability (Wendell, 1996). Once an individual receives a diagnosis, then their disability becomes a socially accepted component of their identity. Social norms represent the second influence on the identity of individuals with a physical disability through stigma associated with being labelled as the “other”.

In any discussion of identity, it is also important to consider the role of the body. Identity is comprised of a combination of both invisible and visible attributes. The body is visible to all in the social and cultural environment through everyday activities playing a large role in shaping the ways in which individuals with physical disabilities can express themselves to others in their immediate surroundings. Their bodies serve as a visual expression of their identity, becoming synonymous with their definition of their physical self (Fox, 1997).

Historically in Ancient Greece, stigma was linked to the body. Individuals with an undesired status (slaves, criminals) were identified through visible signs on their bodies (Goffman, 2006). Given the historical significance of stigma, any form of visible difference continues to be a source of fear.

In current North American culture, physical differences remain the most common source of stigma, leading individuals with physical disabilities to feel a sense of inferiority (Coleman, 2006). Many individuals with physical disabilities devote a great deal of the resources in their efforts to reduce the visibility of their disability while in social settings. Minimizing the visibility of their disability (also known as passing) assists to increase comfort in their interactions with other members of the general population (Coleman, 2006). With regards to physical activity, individuals with physical disabilities

identified stigma as a prominent barrier to physical activity in community-based environments (Martin-Ginis & Hicks, 2007).

One consequence of stigma places individuals with physical disabilities into the category of “other”. Individuals who exhibit undesired characteristics (such as the use of a mobility aid, excess body weight, lacking one limb) are placed into the category of “otherness” with its own hierarchical structure. Individuals that are able to minimize the visibility of these undesired characteristics sit atop this hierarchy. Among individuals with physical disabilities, those who are able to gain the most control over their bodies sit atop the hierarchy, as their bodies and physical appearance are closest in proximity to the “normals”. Along with the myth of control, the hierarchical structure among the others emphasizes control of the body as a key factor in whether or not an individual is defined as disabled (Wendell, 1996).

Participation in leisure activities plays an important component of the development process, presenting youth with opportunities to explore and build various components of the physical self into their identity. Individuals are drawn to leisure activities associated with the images of their desired identity. In North American culture there is a social consensus that links certain forms of leisure with certain identity images (Haggard & Williams, 1992)

For individuals with physical disabilities, the opportunity to participate in physical activity represents a challenge to their “otherness”. Among school-aged individuals with disabilities the opportunity to participate in physical activity provides them with an additional context to socialize with others beyond school. Participation in a segregated program with other participants with physical disabilities resulted in decreased

awareness of disability and the opportunity to develop a positive sense of identity (Groff & Kleiber, 2001). While there is a limited amount of time to interact with their peers during school hours, participation in an after school physical activity program provided them with a common interest and an additional context beyond the academic context to expand their social networks.

One common perception is that individuals with physical disabilities are unable to participate in community-based sports programs due to their levels of skill. Participation in physical activity programs facilitates increased competence in motor skills, allowing individuals with disabilities to show off their skills to their peers and significant others (Taub & Greer, 2000). Research has proven that contrary to the belief that segregated programs are the most effective venue to achieve such benefits, it is not the context itself, but rather the opportunity to participate in physical activity associated with such changes.

Participation in physical activity programs allows individuals with disabilities the opportunity to challenge the “sick” role they are assigned as it allows them the opportunity to experience their bodies in new ways (Goodwin, Thurmier & Gustafson, 2004; Blinde & McClung, 1997). Physical activity provides individuals with disabilities the opportunity to challenge and re-define their social identities. With such a powerful influence on their identities, it is alarming the high rate of sedentary lifestyles among individuals with disabilities.

Obesity

Western cultures direct a great deal of attention towards the body and its physical appearance. Many words exist in the English language that can be used to describe the body's physical attributes. Science and medicine developed technical terms to describe

the body's weight. Obesity is defined as the accumulation of an unhealthy level of body fat associated with an increased risk of medical complications such as diabetes and cardiovascular disease (Kumanyika & Brownson, 2007). When someone remains obese during a prolonged period of their life, these medical complications may lead to a premature death. The complications associated with obesity are not limited to physiological conditions. Obesity is also associated with a greater risk for psychological complications such as lower self-esteem and issues with body image (Kumanyika & Brownson, 2007).

Predictive links between weight status in adolescence and adulthood are possible using BMI. Obesity during adolescence places individuals at a greater risk of maintaining this weight status throughout the duration of their lifespan (Wang et al, 2008). The prevalence of obesity in North American cultures can be attributed to two major aspects of modern lifestyle: Diet and Physical inactivity. Educational interventions aimed at guiding members of the general population to develop the knowledge necessary to make healthy lifestyle choices plays a key role in prevention.

Current North American diet contains a large quantity of fatty food with lower quantity of foods that are high in fibre (Hills, King & Byrne, 2007). Opting to include high fat foods is often attributed to their convenience in comparison to healthier foods. High calorie fast food chains and pre-packaged foods are easily incorporated into fast-paced lifestyles.

Eating habits developed in childhood and adolescence shape eating habits that are maintained among adults. During childhood, parents are in a position of power to ensure that their children eat foods that will provide their bodies with the nutrients necessary to ensure optimal development. As these children grow older and gain more independence,

they assume more control in their food choices and eating patterns (Kumanyika & Brownson, 2007).

Education and information play key roles in guiding members of the general population in the right direction to develop healthy eating habits. Research supports the influence of dietary choices on weight. Diet plays a large role in maintaining good health. In order to maintain good health, individuals must be aware of what to include in a well-balanced diet to assist them to maintain a healthy weight and ensure that their body has enough energy to allow them to perform their daily routines efficiently.

A diet consisting of too much fat creates a positive energy balance, where the amount of energy that they provided to the body through the foods that are consumed is greater than the amount of energy that the body requires to perform its most basic metabolic functions (Kumanyika & Brownson, 2007). Continued lifestyles with a positive energy balance leads to weight gain. One solution to preventing a positive energy balance is to use this excess energy through participation in physical activity.

In order for exercise to have an impact on weight, it is recommended that individuals engage in moderate-to-vigorous forms of physical activity. Just like the strategies that can be used to influence dietary habits, early education and intervention are effective in offering suggestions on ways that members of the general population can increase their levels of physical activity. Examining the reasons associated with decreased levels of physical activity provides guidance in developing effective intervention strategies.

Individuals with disabilities face greater challenges to increasing their levels of activity due to various environmental and social barriers. One major concern associated

with weight status among individuals with disabilities is the possibility of increased complications due to secondary conditions. Additional chronic conditions amplify the role of disability by increasing the amount of effort required for ambulation and decreased independence (Rimmer, Rowland & Yamaki, 2007). The consequences of obesity on health have a greater impact on individuals with disabilities adding additional strain and demands on their bodies.

Prevention of obesity through health-promotion and recreational programming is essential to ensuring that individuals with physical disabilities experience independence and a comfortable quality of life. The success of such programs hinges on their ability to account for the social and environmental barriers individuals with physical disabilities encounter as they go about their daily routines. Such programs should contain education about managing weight through diet and physical activity. Future research should clarify strategies that are effective in combating obesity among individuals with physical disabilities in their homes as well as through community-based recreational settings.

Swimming

Community pools, lakes, rivers and oceans represent a range of venues that make swimming a popular form of physical activity worldwide. The unique characteristics of water are called upon by numerous disciplines such as medicine, education and recreation. As a venue for physical activity, water easily accommodates individuals with all levels of physical skill.

The evolution of cultural interest in aquatic environments dates back to ancient Chinese, Greek and Egyptian cultures. Among each of these cultures, historical evidence reflects an interest in using water as a venue for therapeutic purposes (Lepore, Williams

& Stevens, 2007). These ancient cultures were the first to link the aquatic environment and water to medical treatment and rehabilitation.

North American interest in water emerged in the late 1800s from the natural mineral springs and spurred the growth of medical interest in the potential of water to treat disability and disease. Hydrotherapy is the term used to define the modern use of water to treat illness and disease. Systemized by Orthopaedic surgeon Charles Lowman in 1930, hydrotherapy proved to be a valuable environment for therapeutic intervention (Lepore, Williams & Stevens, 2007). Based on the successes experienced with hydrotherapy, interest developed in the 1960s in exploring the possibility of providing recreational activities in water for individuals with disabilities.

Initially community organizations such as the YMCA worked under the guidance of medical professionals to establish aquatic programs such as swim lessons and competitive swimming programs for individuals with disabilities (Lepore, Williams & Stevens, 2007). Recreational and competitive swim programs in existence today remain in the hands of community organizations.

Much of the interest in swimming and aquatic programming stems from the knowledge of water's unique characteristics. While immersed in water, individuals with physical disabilities experienced several benefits such as increased muscular strength, improved circulation, and increased independence in their movement (Getz, Hutzler & Vermeer, 2006). The list of water's abilities to influence the physiological status of the body supports the relationship between the aquatic environment, medicine and rehabilitation.

Statistical analysis and longitudinal data on the health status of adults offers insight into the potential advantages of physical activity in the aquatic environment. Changes to health associated with popular forms of physical activity such as running, walking, and swimming were compared with each other as well as with a sedentary lifestyle. Adults who participated in running and walking as forms of physical activity had lower Body Mass Index than adults participating in swimming. The link between swimming and higher BMI may be due to the fact swimming was a popular form of physical activity for women with chronic diseases such as arthritis (Chase, Sui and Blair, 2008). Due to water's many unique characteristics, swimming is an ideal way for an individual with a chronic condition or disability to maintain an active lifestyle.

The physiological benefits of physical activity in water-based programs has the potential to augment land-based programs. Comparing the impact of participation in aquatic versus land-based activity programs reveals a link to perceived competence and social acceptance in children with Cerebral Palsy. Using statistical analysis and standardized instruments to measure the levels of perceived competence and the impact of physical activity in both aquatic and land-based environments revealed that participation in aquatic programming assisted in increasing social acceptance (Getz & Hutzler, 2007). The increase in social acceptance may be attributed to the increased freedom in movement children with Cerebral Palsy experience as they participate in aquatic programming.

Unfortunately, this study focuses on the experiences of children with physical disabilities in aquatic programming from the perspective of the medical model. The positive impact of their experiences in the aquatic environment may influence their

choice towards life-long participation in physical activity and recreation. Further qualitative studies could elaborate on the meaning of aquatic activities on the lives of individuals with physical disabilities.

Along with the many physiological benefits there are many psychological benefits linked to physical activity in the aquatic environment. Swimming offers the potential to influence the identities of youth with physical disabilities as a form of physical activity that offers individuals with disabilities the opportunity to engage in competition and become a member of a team. Athletic identity is the degree to which an individual wants others to consider them to be an athlete (Martin, Adams-Mushett & Smith, 1995).

A survey of 57 elite swimmers with physical disabilities indicated that competitiveness was linked to the prominence of their athletic identity. Those swimmers who reported they felt highly competitive saw that their athletic identity was a major component of their identity (Martin, Adams-Mushett & Smith, 1995). This study acknowledged the role swimming played in the psychological development of individuals with physical disabilities. Swimming is a form of physical activity allowing individuals with physical disabilities to build their athletic identity. Among individuals with physical disabilities, the prominence of their athletic identity helped them challenge social labels and deal positively with stigma associated with their disabilities.

Despite the range of possible benefits from participation in aquatic programs, any or all benefits could be negated if the instructor created a negative or hostile environment. The severity of the physical disability held a significant influence on the attitudes of novice instructors. Attitudes among novice instructors are more likely to be open and supportive towards participants with mild disabilities and are more likely to exhibit

hostile attitudes towards participants with severe disabilities (Conaster, Block & Lepore, 2000). Instructors with extensive training in both adapted physical activity and aquatic programming were more likely to hold a positive attitude when teaching and working with a participant with a severe disability (Conaster, Block & Lepore, 2000).

One of the main explanations of this difference in attitude towards participants with physical disabilities is the extent of the instructor's experience in working with individuals with physical disabilities in the aquatic environment. Experienced instructors call upon their practical experiences as well as their training to create a positive experience for any individual that seeks to participate in their programs.

Determining the best method of instruction for individuals with disabilities is generally left up to the instructor who must carefully shape the experience according to individual needs. Traditional approaches to teaching individuals to swim follows a bottom up approach. Newer skills appear in sequential order, starting with the simplest skill (starting with the simplest) and gradually working towards the more complex skills (working towards the top). Swimmers must learn to master a front float before they can learn to swim freestyle. An alternative method of instruction is to use a top down approach. The instructor begins teaching a skill starting at the top (most complex skill) which would allow participants to develop skills in their own unique patterns (Gelinas & Reid, 2000). A swimmer may master the backstroke before mastering a back float.

Examining the performance of 40 children with physical disabilities as they learned to swim using a checklist of specific requirements associated with each skill revealed the most effective technique of instruction for individuals with physical disabilities. In learning freestyle, 80% of the children followed an atypical pattern. In

learning backstroke, 55% of the children failed to perform a back float successfully but were able to swim backstroke (Gelinas & Reid, 2000). When teaching adapted aquatics in integrated or segregated programs, instructors understand that there is no universal pattern of skill development in teaching participants with physical disabilities to swim.

While the physiological benefits associated with swimming for individuals with physical disabilities are well documented, little information is presented to offer an explanation of the meaning of their experiences in the aquatic environment. Future research should focus on developing in-depth explanations of the impact of movement and physical activity in the aquatic environment on the experiences in physical activity, identity, and social relationships among individuals with physical disabilities.

Scuba Diving

Science and technology shaped the possibilities for interaction with the world and surrounding environment. In 1825, William James invented the first self-contained underwater breathing apparatus (SCUBA) founding the experience of scuba diving (Harper, 1968). This invention influenced the possibilities to interact within the aquatic environment.

Initially scuba diving was an activity reserved for elite population groups who possessed the resources necessary to undergo training and purchase equipment. Initially only the military, and experts in marine and aquatic environments such as Jacques Cousteau were able to participate in scuba diving. Both groups held a significant amount of control over the ways the majority of the population viewed natural aquatic environments (Lynch, 1996).

Advances in technology led to the invention of equipment that increased the efficiency of scuba diving. In 1930, the invention of the closed circuit scuba system increased the possible length of a dive. Jacques Cousteau continued to advance the possibilities of exploration in the underwater world in 1940, when he created the aqua-lung system. The aqua-lung, an open-circuit scuba system increased mobility and ease of movement in the water during a dive (Harper, 1968).

Scuba diving is now a popular recreational activity (Lynch, 1996). With increased popularity of scuba diving came an increased concern over the safety of participants. Divers are at a risk for several medical complications due to the stress placed on the human body as they explore the aquatic environment. Current literature on scuba shows how developing an understanding of the medical consequences associated with scuba diving has received a great deal of attention.

Individuals with physical disabilities experience additional barriers established by social and medical models that influence the forms of physical activity that are offered to individuals with physical disabilities. Organizations offering adapted physical activity and leisure challenge barriers that prevent individuals with a disability from participation in activities such as horse back riding, sailing, and scuba diving.

In North America, the Handicap Scuba Association (HSA) has taken on the role of training instructors and creating the opportunity for individuals with disabilities to engage in scuba diving. Through various articles in magazines and video clips the HSA has taken the lead in sharing information about adapted scuba diving experiences to help individuals with physical disabilities overcome potential barriers that may prevent them from pursuing scuba diving as a recreational activity.

Along with the diverse methods of sharing their message, the HSA has devised a certification system for adapted scuba divers. This certification system consists of three levels ranging from level A to level C (Chamalian, 2001). An individual certified at level A has the highest degree of independence as a scuba diver and is able to act as a diving buddy to both able-bodied and disabled divers. An individual certified at level C requires a dive buddy to assist them in controlling their movement and buoyancy in the aquatic environment.

The psychological benefits associated with adapted scuba diving have recently begun to receive attention due to increased interest in the sport. One study examined the psychosocial benefits of adapted scuba diving in adult males with acquired disabilities. Through in-depth interviews with three male divers, this study confirmed diving has a diverse psychosocial impact on the lives of individuals with acquired physical disabilities. Participants reported that participation in adapted scuba allowed them the opportunity to experience a degree of freedom from their impairment throughout the duration of their dives (Carin-Levy & Jones, 2007).

In addition to their experiences during the dive itself, participants felt adapted scuba diving provided them the opportunity to enhance their social experiences as they interact with able-bodied divers in the organization beyond the aquatic environment itself (Carin-Levy & Jones, 2007). While in the aquatic environment all scuba divers work together in teams taking the role of a “dive buddy”. These dive buddies are responsible for the safety of their partner. If an emergency were to occur during a dive, it is the dive buddy’s responsibility for taking any appropriate actions (Carin-Levy & Jones, 2007).

While this study provides ample support for the experiences of adults with acquired disabilities, its findings remain limited, as it did not employ multiple methods of data collection. Future studies examining the meaning of adapted scuba could benefit and yield deeper understanding of the significance of this experience by employing a design, which calls upon multiple methods of data collection.

CHAPTER 3- DESIGN & METHODS

Overall Approach and Rationale

The focus of this particular study draws from my own experiences within the aquatic environment as an athlete and as a coach. Within the research process it is important to acknowledge this personal connection, since my experience as an athlete and as a coach will influence my stance as a researcher. The final product emerging from this research presents information highlighting the significance and meaning of the aquatic environment in the lives of individuals with physical disabilities. This interpretation of the information gathered through my interaction with athletes, significant others (parents, spouses), and coaches in the two forms of aquatic activities was influenced by my philosophical assumptions, worldview and the characteristics of qualitative research.

Ontology and Epistemology guide my philosophical beliefs on the nature of research. Ontology represents my views on the nature of reality (Willis, Jost & Nilakanta, 2007). Embarking on conducting qualitative research, I embrace the notion that multiple realities exist among participants and become evident through the unique descriptions that they share (Creswell, 2007). Epistemology guides beliefs about how I am able to know what I know through a closeness established between researcher and informants/context of interest (Creswell, 2007). Through research conducted in collaboration and interaction with informants, I am able to gain information to assist in developing a deeper understanding of the meaning of their experiences.

Beyond the influence of my philosophical beliefs, this process flowed from the assumptions of my worldview. A worldview is a set of beliefs that guides action and decisions as I conduct my research (Creswell, 2007). Interpretivism is the worldview that

shaped the direction of this study seeking to understand the meaning of the world through the information shared by participants (Creswell, 2007). This understanding is not only shaped by the informants' perspectives, but my own background will influence the interpretation and overall outcome of this study as well (Creswell, 2007). In the case of this study, the desired outcome was to arrive at a deeper understanding of the experiences and meaning of physical activity in the aquatic environment in reference to how it enhances social, political and cultural understanding of its impact in the lives of individuals with physical disabilities.

There are numerous characteristics associated with qualitative research guiding the overall direction of this study. These characteristics were used to guide the direction of the study and assisted in selecting the methods used for data collection and data analysis (Patton, 1990).

Naturalistic inquiry is one of the basic characteristics guiding the process of qualitative research. To gather information and deepen understandings of a particular experience, qualitative researchers must go out into the world and visit specific sites that are able to yield information to arrive at an answer for the research questions (Creswell, 2007). In this case, the sites selected must be able to yield information about the meaning of physical activity within the aquatic environment for individuals with physical disabilities. Guided by the research questions for this study, the sites selected were both community based non-profit organizations that offer adapted aquatic programs to individuals with physical disabilities.

An additional quality associated with qualitative research acknowledges the role of the researcher in the process (Creswell, 2007). As the primary researcher in this study, I

played a key role in the process and overall outcome. One area where I held significant influence was through the instruments that were developed. In this particular study, interview guides, protocol for lived experience description and artifacts were instruments created to gather information about the context and particular experience of interest. Using these instruments, multiple sources of data were used to facilitate a deeper understanding of the experiences and meaning of physical activity in the aquatic environment for individuals with physical disabilities (Creswell, 2007).

The instruments and methods of data collection were used to yield insight into participants' meanings of their experiences in the context of interest (Creswell, 2007). I was able to engage in a direct and personal interaction with the members of a particular group of interest (Patton, 1990).

Qualitative research is a collaborative process. Inductive analysis built themes from the data produced through my interaction with the participants in both forms of aquatic programming (Creswell, 2007). Through my interaction with each participant we worked together towards a common goal in developing an understanding of the emic perspective of a physical activity in the aquatic environment for individuals with physical disabilities (Creswell, 2007).

One final characteristic of qualitative research is emergent design. While the researcher develops an initial plan for their projects, this plan is flexible and may shift as they enter the field and begin the process of data collection and analysis (Creswell, 2007).

The language of the research question guides the particular approach to the research process that is best suited to developing a deeper understanding of the meaning of the aquatic environment. As stated in the introduction, the purpose of this study is to

develop an understanding of the lived experience and derived meaning associated with physical activity in the aquatic environment to enhance understanding of its impact in the lives of individuals with physical disabilities.

In this particular case, the language of the research question points towards phenomenology. Phenomenological research acknowledges the primacy of the lived body as the origin of any action and knowledge of the world (Connolly, 1995). All humans shape their experiences and understanding of the world through their bodies.

Phenomenological research attempts to develop an understanding of a particular experience among members of a particular group. Through the stories and descriptions provided by participants, the goal of this process was to uncover the essential elements of a particular experience for members of a particular group (Van Manen, 1990). In this particular study the aim was to uncover the meaning of physical activity within the aquatic environment and how it influences the relationship individuals with physical disabilities develop with their bodies.

Interactions with members of a particular group assisted to provide a deeper understanding of the meaning associated with the phenomena of interest. In this case, the phenomenon of interest is participation in physical activity within the aquatic environment. To arrive at this understanding it was necessary for me to go out to the facilities where individuals with physical disabilities are able to engage in physical activity in the aquatic environment (specifically in scuba diving or swimming).

Once entry into the facilities and organizations offering aquatic programming to individual with physical disabilities was granted, I began the process of data collection. Engaging in an interaction with participants, I asked them to describe their experiences

within the aquatic environment. Going out and asking individuals with physical disabilities to describe their experiences provided detailed information about either form of aquatic activity (Rossman & Rallis, 1998).

Phenomenological research presents the researcher with several assumptions that guide the choices made in the research process. Phenomenology is an approach to research concerned with the study of a particular lived experience (Van Manen, 1990). The starting point is a particular topic, action or experience with which the researcher has had a close personal encounter. This provides her with her initial questions to begin the research process. In the case of this study the starting point dealt with the understanding that physical activity within the aquatic environment takes on some form of meaning based upon my own personal experiences as an athlete and coach.

Once the focus of the study was narrowed to focus on particular phenomena, the next step in the process unfolded through two main processes. Initially, the researcher went out into the field to gather descriptions through conversations with those who experience particular phenomena of interest (Van Manen, 1990). Engaging in conversations with participants occupying diverse roles and with different perspectives within each form of aquatic program helped to gather information used to develop answers to the research questions. Once all the information about a particular experience was collected, the next step in the research process moved on to interpretation of these experiences based on the descriptions provided by participants who shared their stories and descriptions of their experiences (Van Manen, 1990).

Phenomenological researchers focus the initial direction of the research process by asking the question “what is this particular experience like?” Asking this question

provides some initial guidance towards the path that allows them to develop an understanding of the significance and meaning of a particular experience. To arrive at this understanding, qualitative researchers develop tools to help them gather information about the life world of a particular group of individuals (Van Manen, 1990). In this particular study, I asked “what is it like to engage in physical activity within the aquatic environment for youth with physical disabilities?” In order to arrive at an answer to this question, I entered into the life world of select individuals with physical disabilities to collect information that I hoped would help me examine the significance of their physical activity in this context. The specific methods that were used to collect data in this study are explained in greater detail in the methods section of this paper.

Through phenomenological research, it is possible to gather explanations and conduct analysis of this information that will lead to a deeper understanding of the experiences of a particular group from an insider’s perspective (Connolly, 1997). This insider’s perspective presented descriptions and information on the meaning of either form of aquatic program as it appeared to their consciousness. All participants were unable to provide descriptions of experiences that they had not yet encountered in their experiences in the water therefore all knowledge produced through phenomenological research is retrospective (Van Manen, 1990). All questions geared towards future experiences in the aquatic environment examined how future goals or potential barriers influenced their current experiences as either a swimmer or as a diver.

In addition to reflecting on the meaning of their experiences in/under the water, phenomenological research accounts for the role of the senses in shaping the nature of individual experience within a particular context (Patton, 1990). This means that the

interpretation of a particular experience is also shaped through sensory information (what we see, feel, hear, smell and taste) at that particular moment in time.

Phenomenological researchers encounter some limitations in the process of developing an understanding of a particular experience. The first limitation I will encounter is based on who I am able to approach to gather descriptions of the meaning of a particular experience in a particular setting. Interviews are one of the methods that will be used to develop an understanding of a particular experience in the aquatic environment through conversation and examination of the language that appears in the transcript of that conversation.

Participants must be able to engage in a lengthy conversation about an experience within the context of interest. The purpose of this project was to collect data that could lead towards developing a deeper understanding of a particular experience in a particular context. In this study, the context of interest is the aquatic environment. Swimming and scuba diving were both explored to develop an understanding of the significance of physical activity in this context for individuals with physical disabilities. Participants had some form of experience within either activity. If an individual had not been exposed to the particular context and experience of interest, then they would not be able to generate any form of useful description. Participants could not describe something that they had not experienced.

Interviews served as one of the main methods used to generate a detailed understanding of the significance of physical activity in aquatic environments for individuals with physical disabilities. It was important therefore, for the participants to be able to engage in conversation with the researcher. The language used to describe their

experiences within a specific aquatic environment guided the researcher to discovering the essence of this particular context.

The ultimate goal of phenomenological research is to uncover the essence of a particular experience. This essence represents the universal aspect for all who are exposed to a particular experience within a particular context (Van Manen, 1990). In this case I am interested in uncovering the essence of the experiences among individuals with physical disabilities within the aquatic environment.

One strength of phenomenological research is that it offers both a reflective-analytic and lived approach to conducting qualitative research. Phenomenological research is a reflective-analytic process in the sense that throughout the research process it is necessary to maintain a strong relationship with the topic of interest (Van Manen, 1990). In this case, it allows me to reflect upon my own experiences as an athlete and coach. Reflection upon my own experiences in the pool served as the inspiration for the research questions and guided some of the major decisions (site selection, methods, and framework) that directed the research process.

Phenomenological research acknowledges that the researcher plays a key role in the outcome as she is the guardian of the essence of a particular experience. Through the proper research methods and analysis of the descriptions shared by participants, phenomenological research is a reflective analytic process allowing the researcher to arrive at the essence of a particular experience through the pursuit of authentic descriptions and accurate interpretation (Van Manen, 1990). The overall process and outcome is shaped through both my actions and decisions.

Phenomenological research is also a lived process in the sense that I have a strong connection to the research question. This connection served as a source of motivation throughout the process and assisted in focusing my attention to develop a deeper understanding of the meaning and significance of adapted swim and scuba among individuals with physical disabilities. This approach recognized that the participants experienced a great deal of freedom in the ways they experience and interpret the world in which they live (Van Manen, 1990).

Phenomenological research remains a process focused on examining the lived experience as it acknowledges that multiple perspectives exist in association with a particular context. Selection of participants involved careful thought, as I was driven by the desire to pursue the multiple perspectives existing within a particular group of individuals who are exposed to similar activities and experiences within the context of interest.

Site and Population Selection

Selection of the specific population group as well as sites for data collection played a large role in the outcome of the research process. The choice of site provides an overall direction for the scope of the project. Notably the specific locations and population of interest may be general or specific depending on the type of research and the research question itself (Rossman & Rallis, 1998).

Creswell presents a conceptual model, the data collection circle to explain the roles and relationships of various aspects of the research process. The logical starting point of this circle was the selection of the particular sites used for data collection. The second step in the process was to determine the group of interest and negotiate access to

facilities and programs that catered to the members of the group of interest. Overall, the decisions made at the point of entry influenced the methods of data collection and analysis used in this study (Creswell, 2007).

The sites and programs selected for this study were guided by the research questions and the assumptions of phenomenological research. All sites were associated with the specific context of interest. Participants approached must have previous experience with phenomena of interest. In the case of this study, two sites were selected as locations for data collection. Both locations shared similar criteria as both were community-based organizations offering a form of aquatic programming for individuals with physical disabilities. The two forms of aquatic activity that were selected met similar criteria as adapted swim and scuba programs are both offered throughout Ontario, Canada and North America through community-based organizations.

Swimming (specifically a competitive swim program) was the first type of aquatic activity selected based on the popularity and range of programs available within the pool. Learn to swim programs and competitive swim programs are prominent in Ontario. Swim team programs operate both recreational and competitive programs. Scuba diving was selected as the second form of aquatic programming serving as a contrast to the swim program selected. Adapted scuba emphasized the recreational and leisure aspect of the aquatic environment, whereas the swim program focused on physical fitness and working towards competition.

Scuba programs begin having participants learn skills in the indoor/ artificial aquatic environment (indoor pools) working towards the natural, open water environments (lakes, oceans). Swimming can occur in either artificial or natural aquatic

environments, but in this particular study the focus will be on the artificial environment of indoor pools and with a competitive swim program.

Participants were recruited through two different organizations. The first offering adapted scuba and the second offering a competitive swim program. Within both organizations, participants were recruited using criterion based purposive sampling. All participants satisfied pre-determined criteria that assisted to develop in-depth and complete understanding of the meaning of adapted aquatics for individuals with physical disabilities (Patton, 1990).

To participate in this study, all participants had to occupy some role with an aquatic organization providing them with knowledge of either adapted scuba or swimming. In the case of this study, I was interested in selecting individuals who occupied three different roles and provided three different perspectives on the meaning of physical activity within the aquatic environment for individuals with physical disabilities.

The first role was that of an athlete (either a swimmer or scuba diver). All athletes were approached and asked to share their own personal experiences within the aquatic environment. Each athlete was an individual with a physical disability (either congenital or acquired). They were approached as a member of the specific organization offering the swimming or scuba diving.

The second role is that of a significant other for an athlete that agreed to participate in this study. Significant others (parents, spouse, team mate, dive buddy) were asked to provide descriptions from their perspective on the meaning of their child/spouse/team-mate/dive buddy's experiences in the aquatic environment.

The third and final role is that of the coach/instructor, who plays a major role in the experiences of the athletes involved in particular programs. Coaches/ instructors possessed knowledge about the range of skill and experiences among those who participated in their programs.

Triangulation of sources helped to achieve the goal of this process by seeking out multiple perspectives on the experiences of individuals with physical disabilities in the aquatic environment. These descriptions were collected through interactions with participants asking them to reflect on the meaning of a particular experience (either swimming or scuba diving) within the aquatic environment. Participants must have been involved in either program (swimming or scuba diving) for a minimum of 6 months (or ½ of a season).

Further elaboration on the methods of data collection is provided in the methods section. Two of the main methods of data collection relied on obtaining the descriptions through verbal communication. In order to provide meaningful data, each participant must have the ability to carry on a conversation with strong expressive and receptive language skills.

The criteria for sufficiency assisted to determine when an adequate number of informants provided a description of their experiences in the aquatic environment. Throughout the process of data collection I asked myself the question “is there a sufficient number of participants to reflect the range of experiences possible to allow an outsider to connect?” I arrived at an answer to this question by seeking participants who were able to provide descriptions of the range of possible experiences within either form of aquatic activity (Seidman, 2006). In this case, sufficiency was approached by seeking

out participants with varying levels of experience and diverse forms of physical disabilities within both aquatic sports.

Two forms of gatekeepers presented themselves as obstacles to my entry into the field. Gatekeepers are present either formally or informally within an organization taking control over opportunities to interact with participants, implementing regulation and protecting what an outsider is able to learn (Rossman & Rallis, 1998). Before a researcher is able to approach participants in a particular program they must negotiate access with the gatekeepers. Once this is accomplished, the researcher may recruit participants from the program/organization of interest.

The first formal gatekeepers encountered in this particular study were the organizational gatekeepers in the adapted scuba organization and in the adapted swim program (Seidman, 2006). Organizational gatekeepers were initially approached in writing through a letter of invitation to obtain consent that they are willing to co-operate in this project. This letter provided in Appendix A included information about the purpose of the project as well as the resources that were requested in order to complete this project. In this case, the letter indicated the particular program of interest (either adapted scuba or adapted swimming programs) as well as the need for a small room (such as a meeting room) to conduct interviews.

The second formal gatekeeper encountered in this process involved negotiating access to participants under the age of 18 with their parent or guardian. Parents/guardians are the individuals who controlled access to and the nature of the interaction between the researcher and their child (Seidman, 2006). Parents were approached only after organizational approval was provided. Once organizational permission was granted,

a face to face meeting was scheduled with parents of participants under the age of 18 in both aquatic programs to provide them with the opportunity to engage in conversation about the purpose of the study and the details of their roles within the interviews and other modes of data collection (Kvale, 1996). Parents were provided with a letter of invitation (see Appendix A) that included my contact information and were encouraged to e-mail or call if they had any specific questions or concerns.

Methods

The choices of the methods used in this study were guided by the research question and overall approach to research. In the case of this study, triangulation of methods assisted to ensure that I arrived at a deeper understanding of the meaning of physical activity within the aquatic environment for individuals with physical disabilities. The three methods used to collect data in this study were interviews, lived-experience descriptions, and visual artifacts. The following section serves as an elaboration of the arguments for using each method to collect information about the experiences of individuals with physical disabilities in the aquatic environment.

Interviews served as the main method of data collection for this study as they provided the opportunity to engage in an interaction with participants to gather the details associated with their experiences in the aquatic environment. This particular method of data collection is called upon to seek out information about particular aspects of the life worlds of the members of a specific group (Kvale, 1996). These aspects are often difficult to observe. As the ultimate goal of this project is to develop a deeper understanding of that particular experience, interviews presented the best method to arrive at the desired outcome.

Just as there are specific assumptions associated with various approaches to the research process, there are also assumptions attached to particular methods used to collect data. The major assumption associated with the choice of an interview is that it takes into consideration that the perspective of the members of a particular group are meaningful (Patton, 1990). The choice to conduct interviews was made based on the belief that engaging in a dialogue with participants during which they describe their experience would yield a deeper understanding of a particular experience.

Many forms of interviews are available to assist qualitative researchers in achieving their goal to arrive at a deeper understanding of a particular experience. In this study an interview guide approach was the type of interview used. This approach allowed me to develop a general outline of topics of interest to be discussed before I began the interview process.

I used interview guides developed for this study to help organize and focus the interviews so that the resulting transcripts would produce data that would increase overall understanding of particular experience (Patton, 1990). The major assumption associated with the interview guide approach is that the participants are the experts on their personal experiences and are able to provide detailed descriptions on a topic or experience of interest (Patton, 1990). In this case, participants occupying one of three different roles (athlete, significant other, and coach) were approached and asked to share their perspectives on the meaning of the aquatic environment for individuals with physical disabilities.

Three separate interview guides were created and used for the interviews in this study. An interview guide was developed for each role (athlete, significant other, and

coach). Copies of these interview guides are provided in Appendix B. The questions appearing in each interview guide were formulated based on Patton's six types of questions in the form of a matrix. Each interview guide was composed to include all six types of questions as each type of question is capable of providing a different type of information.

The first type of question used in the interview guides was experience/behaviour based. These questions were asked to yield information about what an individual does or has done within a particular context (Patton, 1990). By asking individuals about their experiences or behaviour within a particular context, the researcher hopes to obtain descriptions of actions and events that could have been observed if they had been present in the context of interest.

Experience and behaviour questions used in the interview guides for this study sought to develop knowledge of the various adaptations made to instructions, skills and equipment as they participated in either form of aquatic activity. Questions also explored what an individual did while in the water. Knowledge of behaviour and experiences within the aquatic environment provided concrete information with regards to the overall experiences of individuals with physical disabilities in adapted aquatic programming.

Opinion and value questions represent the second category of questions appearing in the interview guides. These questions were aimed at developing an understanding of various cognitive processes of participants and their impact on interpersonal interactions within a particular context (Patton, 1990). In this study, I used this type of question to gain information about the ways that an individual interprets the meaning of their experience as a participant with a specific aquatic program. The goal of these questions

was to yield information by entering into the minds of participants to understand what guides their thoughts and their interactions with others in this specific environment. Questions used in the interview guides for this study were aimed at developing an understanding of the value of the opportunity to participate in aquatic programming for individuals with physical disabilities. In addition, it was hoped the questions would lead to helping understand the impact of physical activity within the aquatic context in the lives of participants.

The third form of question that appeared in the interview guides were feeling questions. Careful thought was placed into the wording of these questions, as feeling questions can often be confused with opinion questions. The purpose of a feeling question is to gain insight into the affective dimensions of a particular experience (Patton, 1990).

To avoid a feeling question being confused with an opinion question the language of a feeling question explicitly stated a particular emotion. In the case of this study, feeling questions were used to seek out positive (pride, happiness, support) and negative affective experiences (frustration, anger, anxiety) associated with participation in a particular aquatic activity.

Knowledge questions were the fourth category of question used in the interview guides. These questions were used to uncover information about the experience of interest (Patton, 1990). Such questions were used in the interview guides for this study to uncover information about the specific aquatic programs (scuba diving or swimming).

The fifth form of question that appeared in the interview guides were sensory questions. These questions were used to yield information about the sensory information

within the context of interest (Patton, 1990). These questions focused on what individuals with physical disabilities saw, heard, smelled, and touched as they engaged in either form of aquatic activity. Sensory questions in the guides for participants in the role of significant other and coach focused on what they saw and heard within the particular aquatic program (swimming or scuba diving).

Background questions were the final category of questions that appeared in the interview guides. Background questions gathered specific biographical information about participants (age, gender, occupation, level of skill in activity) in relation to others (Patton, 1990).

In addition to the six types of questions that appeared in each interview guide, context sensitive probes were used to provide a more robust response to a question (Patton, 1990). In the case of this study, probes were used for clarification and elaboration of participants' responses to a question during the interviews.

Interviews were held at a location of the participants' choice (either in their homes, at the facility where they participate in the aquatic program or over the telephone). Prior to starting the interview itself, each participant was asked to read and sign an informed consent (for participants over the age of 18, parents of participants under the age of 18) or assent form (for participants under the age of 18). Copies of the consent forms are provided in Appendix C. Once these forms were signed, parents of participants under the age of 18 were invited to stay throughout the duration of the interview upon the athlete's request.

Before starting the interview questions, participants were reminded that participation was voluntary and if any questions made them feel uncomfortable or they

wanted the interview to be stopped all they needed to do was notify the interviewer. To establish rapport with younger participants after reading the opening statement I shared a small photo album with photos to go along with a brief discussion of my background as SWAD/ coach. This brief discussion served as an example providing them with some background information on my experiences, giving them an idea on what information they could provide as a response to the first interview question.

In addition to interviews, the second method of data collection used in this study was an audio recording of a lived experience description. Lived experience descriptions served as a source of raw data on the nature of a particular experience that are helpful in building a deeper understanding of phenomena of interest (Van Manen, 1990).

Lived experience descriptions asked both researcher and participants to write about a particular experience within the context of interest. The final product is a written text focused on a particular experience that assists the researcher to uncover the essence of that particular phenomenon (Van Manen, 1990). Creating my own lived experience description guided the questions that were developed and appeared in the interview guides. This allowed me to reflect on the meaning of my own experiences with the aquatic environment as both athlete and coach. Reading the language that appeared in my own written description offered clues that were used to orient the research process.

In this study, the technique used to create the lived experience description was adapted to be an audio recording rather than a written text. Rather than asking participants to create a lived experience description through writing participants were asked to make an audio recording, since participants may experience difficulty in creating

a written text due to their level of fine motor skill or the amount of time necessary to create a written statement.

Participants were provided with an example as well as instructions on how to create an audio recording of a lived experience after the interview was conducted. Participants were asked to create an audio recording sharing a story from their perspective roles (athlete, parent, coach). Participants were asked to share as much detail about their experience as possible including all sensory information (what they saw, heard, felt, smelled) at that exact moment in time (Van Manen, 1990). In this study participants were asked to provide an audio recording of the lived experience of their choice such as a dive in the Caribbean, getting ready for a dive or swim practice, swimming in a meet. In the transcription process, I transformed the information found in the audio recording into a textual version of the lived experience provided by participants. A copy of the artifact description protocol is provided in Appendix E.

The third and final method used to collect data in this study was the creation of an artifact. Each participant was asked to create or find an image (a drawing or an illustration from a magazine) symbolic of the meaning of the experience of individuals with physical disabilities in the aquatic environment.

The benefit of this method compared to the other two forms of data collection used in this study is that it is an unobtrusive form of data collection. Other than the initial request for the participants to provide the artifact, I did not have any influence on the artifact that was produced (Marshall & Rossman, 2006). The two previous forms of data collection used presented written texts, which outlined the meaning of the aquatic environment through the English language. The artifact created was a work of art and

served as a visual expression of the lived experience of individuals with physical disabilities in the aquatic environment (Van Manen, 1990).

As the interview wrapped-up, participants were given a piece of paper with a set of instructions, which outlined how to create this visual artifact. This artifact was a visual representation of the meaning of physical activity within the aquatic environment for individuals with physical disabilities. If they were unable to create a drawing then they were asked to select an image from a magazine and paste that image onto the paper provided. Each participant was provided with a pre-addressed envelope that could be used to mail this artifact to the researcher. If they forgot to create or send the artifact they created, then participants were asked to create an artifact during the follow-up interview.

Each method used in this project presented information about the experiences of individuals with physical disabilities within the aquatic environment through a different form of language. Interviews provided information about the meaning of swimming/scuba diving through conversation calling upon language to convey the meaning of the experience in a descriptive manner through conversation. Narrating their lived experience description provided additional details about a particular episode that stood out in the minds of the participants in both forms of aquatic activities. Finally, the process of creating or selecting an artifact provided a visual representation of the significance of physical activity in the aquatic environment among individuals with physical disabilities. Combining the visual and written descriptions collected through these three methods worked together to provide a deeper understanding of the experiences of individuals with physical disabilities within the aquatic environment.

Data Analysis

Each form of data collected worked along with the others to reveal detailed information about the experiences and meanings of physical activity within the aquatic environment for individuals with physical disabilities. Data from both the interview and lived experience description were transcribed verbatim using Microsoft office word. Listening carefully produced written transcripts which were printed off and read through three times. In the first reading, the transcript entire transcript was read without any writing. In the second reading, the transcript was read question by question highlighting significant statements or keywords. In the third and final reading relevant life-world existentials were written in the margins question by question. The process of selective thematic analysis was guided by the four life world existentials of lived space (spatiality), lived body (corporeality), lived time (temporality) and lived human relation (relationality) (Van Manen, 1990).

Spatiality represented the themes appearing in the language associated with a particular context. The words used to describe both swimming and scuba diving provided insight into the affective dimensions associated with the aquatic environment (Van Manen, 1990). In the case of this study, lived space provided an understanding of physical activity in the aquatic environment for individuals with physical disabilities.

Lived body played an important role in this project as the body will always play a role in the ways that an individual interacts with the world. The body acts as a physical presence that reveals a great deal about ourselves to others within the environment as we go about our daily routines (Van Manen, 1990). In the case of this study, I am interested in the experiences of individuals with physical disabilities who experience a great deal of

stigma due to the medical and social models of disability as they engage in physical activity. Examining the themes associated with how individuals with physical disabilities relate to their bodies within aquatic environments will yield a great deal of information about the meaning of this particular context for physical activity.

Temporality represents subjective time associated with the experiences of individuals with physical disabilities in the aquatic environment. In this case time is the language or words which were used to explain the temporal dimensions of an individual's past, present and future experiences which united to create a temporal landscape. Events from past experiences remained as a component of their present experience through the memories and emotions associated within the context (Van Manen, 1990). In this study, temporality aimed to yield information on the ways that experiences in other forms of physical activity or within the aquatic environment influenced the meaning of current experiences of the athletes in adapted swim or scuba.

The final existential theme is relationality. Relationality was presented through the language used to explain the relations that emerged through participants' interactions with others in various environments (Van Manen, 1990). In the case of this study relationality was concerned with the language used to explain the nature of the interaction of individuals with physical disabilities between objects and people in their environment.

Once each participant completed the initial interview, provided a narrative of a particular experience and created a visual artifact, the information provided by all participants was organized and analyzed. The strategy utilized in this study to analyze all the data is selective thematic analysis.

Following the initial interview, both the interview and audio recording of the lived experience descriptions were transcribed verbatim. Transcripts for each interview and lived experience description were printed and placed into color coded, labelled folders. All transcripts and informed consent handouts for each participant recruited from the adapted swim program were placed into a blue folder labelled with their pseudonym. All transcripts and informed consent handouts for each participant recruited from the adapted scuba program were placed into green folders labelled with their pseudonyms.

Each transcript was read several times to uncover the themes associated with physical activity in aquatic environments for individuals with physical disabilities. Any words or language appearing frequently within the transcripts identified themes (Van Manen, 1990). These prominent theme words and language were representative of the meaning of swimming/scuba diving for individuals with physical disabilities.

In the case of the artifacts, a theme was any image or symbol appearing frequently. The themes and language emerging from the transcripts and lived experience descriptions assisted in interpreting the themes that emerge from the artifacts.

Ethical Considerations

All researchers must be aware of ethical considerations when they embark on any research project. Qualitative researchers must pay careful attention to the ethical procedures as they engage in the process of data collection. Qualitative researchers must consider the impact of their presence on participants and the context itself as they go out into the field and engage in prolonged interaction with participants.

The first major ethical consideration for this study was briefly mentioned in the section that outlined the rationale guiding the process of site and population selection. In

order to gain access to a specific site, or work with members of a particular organization I negotiated access into the environment of interest with formal gatekeepers (Seidman, 2006). In the case of this study, there were two types of formal gatekeepers. The first gatekeeper was encountered at the organizational level and the second form of gatekeeper encountered in this process was the parents of participants under the age of 18.

Organizational gatekeepers must be approached before beginning the process of data collection and indicate that they were willing to co-operate. Organizational gatekeepers granted access to resources necessary for data collection such as small meeting rooms for interviews and granted access to programs of interest. I approached both types of gatekeeper through a face-to-face meeting to discuss the details of the research process. During this meeting the gatekeepers were provided a letter of invitation (see Appendix A), which outlined the purpose of this study and indicated what resources I would need once they decided to participate. Letters of invitation provided information that informed the organizations, participants, and parents of athletes under 18 of how I planned to maintain confidentiality and anonymity of the participants in this study.

Confidentiality represented an ethical issue that I kept in mind throughout the research process. Both the interview and lived experience descriptions yielded private stories and descriptions that possessed specific identifying features of the participants, I assured all participants that I would protect their identities (Kvale, 1996). In the case of this study, confidentiality was assured using pseudonyms. During the opening statement, participants were asked to select a pseudonym that would be attached to the transcripts and artifacts created out of the information they share.

During the data collection phase the interviews were conducted in a small meeting room (or a location of their choice). Participants were informed of this location prior to their interview. Rooms that were used for the initial interview and follow up interview did not have any signs or markers posted that would indicate any form of association with this study. During the interviews a note was be posted on the door with a request not to be disturbed as a meeting was in progress.

Another ethical consideration kept in mind during the entire research process was informed consent. Letters of informed consent (see Appendix C) were provided to participants over the age of 18 and parents of participants under the age of 18 prior to the start of any data collection. The information in these letters provided detailed information about the purpose, main features of the research project and any potential risks or benefits associated with participation. Athletes, parents, and coaches were reminded that participation was voluntary, and that if they wanted to reconsider their participation before December 31, 2008 all they had to do was notify the primary researcher by telephone or by e-mail (Kvale, 1996).

Participants under the age of 18 were asked to read and sign an assent form before their interviews began. The assent forms provided similar information that was provided to their parents in the informed consent form. Assent forms presented information about the purpose, major aspects of design, and any possible risks or benefits in a straightforward manner.

Along with the ethical considerations, I also considered how I would approach the research process in a trustworthy manner. As a qualitative researcher, I used instruments (the interview guides, protocol for lived experience description and visual Artifact)

created to gather detailed information about a particular context of interest.

Trustworthiness of this particular study addressed three areas of concern: truth-value, rigor and usefulness (Rallis & Rossman, 1998).

Qualitative researchers are able to address the issue of truth-value through the pursuit of multiple perspectives. My chief task in this process was to present an honest and complete understanding of the significance of physical activity in the aquatic environment for individuals with physical disabilities from multiple vantage points (Rallis and Rossman, 1998). Truth-value was pursued through the design of this study- recruiting participants occupying three different roles- that of athlete, significant other, or coach.

Several strategies were incorporated into the research design which assisted in upholding the truth-value of the data that were collected. The first strategy utilized in the design of this study was member checking. Following the initial interview, a second meeting with participants was arranged during the closing statement. During the second interview, I shared interpretation of the data with participants to confirm the accuracy of my interpretation (Rallis & Rossman, 1998). In the case of this study, participants were notified of the intent to conduct member-checking interviews during the opening statement and in the closing statement as the initial interviews wrapped up. The purpose of the second interview was explained to all participants as the opportunity to confirm the meaning of the visual artifact that the participants created.

The second strategy used to support the truth-value of this particular research project was triangulation. Three forms of triangulation appeared in the research design of this study: triangulation of sources and triangulation of methods of data collection and

triangulation of data analysis. All three forms of triangulation were called upon to yield multiple perspectives on a particular experience (Patton, 1990). In this study, recruiting participants who offered a different perspective on the meaning of physical activity within the aquatic environment from their role as athlete, significant other or coach accomplished triangulation of sources.

The second form of triangulation used in this study was triangulation of methods. This study employed three different methods that were used to collect three different forms of data about the meaning of physical activity within the aquatic environment for individuals with physical disabilities. Interviews yielded data through the language that was used in verbal descriptions presenting information about the experiences of participants as swimmers/divers. Although modified in this study, the lived experience descriptions shared through audio recording were transcribed verbatim to yield data through the language that appeared in the written text. The final mode of data collection used in this study was the creation of a visual artifact, which presented a visual symbol of the meaning of swimming/ scuba diving for individuals with physical disabilities.

Triangulation of data analysis is the final form incorporated into the design of this study. Analysis of transcripts examined the life-world existentials. A second form of analysis traced the Etymological origins of keywords associated with the experience and meaning of physical activity in the aquatic environment. The final form of analysis examined the significance of the artifacts (visual or auditory) provided by participants.

The second aspect of trustworthiness in this study was rigor. Rigor is established in qualitative research through thoughtful design and construction of the research protocols. In order to establish the rigor of this study I provided arguments which

supported the rationale for the choices that I made throughout the research process. Rigor is understood to be the extent that outsiders would agree with my decisions in the approach, methods of data collection and analysis (Rallis and Rossman, 1998).

The final aspect of trustworthiness addressed was the usefulness of this study. Qualitative researchers must provide adequate information about the research design and rationale for their decisions they have made to guide their audience in determining the usefulness and applicability of the information presented in this particular study in other contexts (Rallis & Rossman, 1998).

Each of these considerations worked together in the overall design of this study. Confidentiality and informed consent were two elements that looked out for the interests of the participants. The three elements of trustworthiness in truth-value, rigor and usefulness worked together in keeping myself, the researcher on track ensuring that I placed a great deal of thought into each aspect of the research process. Keeping my role as researcher and the interests of participants in mind during the research process were necessary elements to ensure the success of this study.

CHAPTER 4- RESULTS

Data collection protocols were pilot tested during the month of November 2008. Formal data collection began in December 2008 and continued until April 2009. A total of 14 participants were recruited through both forms of aquatic activity. A summary table providing demographic information for all participants is provided in Appendix F. Face to face interviews in the facility were conducted with each participant associated with the adapted swim program (8 participants) before or after a swim practice over the month of December 2008. As all swimmers were under the age of 18, they were given the option to invite their parent/significant other in the room during the interview. The member-checking process and follow up interviews took place over February and March in 2009. One of the swimmers interviewed was also asked questions about his experiences in adapted scuba as he is in the process of getting his certification.

Recruiting individuals involved in adapted scuba proved a challenge. Once a local instructor was contacted and interviewed. A snowball sampling strategy was used to contact individuals involved in diving using the same criteria outlined in the method section. For the divers (6 participants), a face-to-face interview was conducted at a location of their choice (dive shops, in their homes). In the case where a face-to-face interview was not possible, a phone interview was employed to collect data. The member checking process took place over April and early May 2009.

After each transcript was read, it was summarized into a table by question. The summary table contained key words and important quotes in point form. During the member checking process, each participant was asked to read and verify the accuracy of the information presented in the table. These summary tables facilitated comparison of

information provided by athlete and significant other during data analysis and pointed towards additional questions that could be asked during the follow up interview. An exemplar of an interview and lived experience description transcript for each sport as well as the corresponding tables are presented in Appendix G.

Following the member-check, any additional information was added into each summary table and transcript. As outlined in the methods section all of the data from the interviews and lived experience descriptions were analyzed using selective thematic analysis guided by the four life world existentials of body, space, time and relation. After the modified transcripts were printed following the member checks, they were read through several times. Labels were written in the margins of each transcript question by question in accordance with the dominant life-world existential. Separate tables outlining the relevant quotes for each life-world existential were created for each participant. The life-world existential tables highlighted specific quotes from the transcripts indicating the location within the interview and lived experience (LE) transcript. Exemplars of a life-world existential table are presented in Appendix G.

Analysis of Life-world Existentials

Lived Space

In each transcript, quotes relating to lived space (Spatiality) were any statement where the participants talked about their experience in a particular context (Van Manen, 1990). For the lived experience descriptions and interviews associated with participants from the swim program this included any quote that **compared physical activity on land** to their experiences in **physical activity in the water**.

Rock star. Well physical activity on land sometimes at *gym class* at school like *in basketball or soccer I don't feel included*- stuff that it's really hard to participate when you can't see what's going on. *In the water* I feel like *I'm just free* and *I know I am able to participate*- there's nothing stopping me.

Additional examples of ways that lived space appeared in the swimmer transcripts were any quotes where participants talked about a **swim practice, lesson or swim meet**. Quotes associated with lived space also included any **language used to describe** the particular aquatic **environment** (the pool deck, the pool) as well as the participant's **affective response** to that particular space.

Rock star. Sure- the *freedom is*- when I'm walking around I know there could be stairs or curbs- when I'm *in the water I know there's nothing in my way*. I can go anywhere and know that I *won't hit anything* and I don't need someone to tell me where to go and yeah- it's just such a *relaxing* feeling- just gliding through the water.

In the transcripts for the participants associated with adapted scuba, quotes associated with lived space included the *comparison* between a dive *in a pool* and a dive in the *open water*.

Blue Mermaid. Um- in *a pool- having that security of four walls around you and that clarity and having your instructor a few feet away* and your buddy- when you're *in the ocean you don't have* that safe environment and *four walls around you* and that safe environment with the life guard and you don't have the same visibility and *it's wild* and there's things swimming around you and it can be choppy- you're *dealing with the weather*.

Additional aspects of lived space appeared in the scuba transcripts compared the experience of individuals with physical disabilities in **physical activity on land to their experiences under the water**. These descriptions included descriptions of the **sensory aspects** of the aquatic environment (diver's underwater worlds they had explored in an open water dive).

Blue Mermaid. It's also *quiet* you know what- quiet- *all you hear is the water* the luwp luwp luwp or whatever the sounds are- I like them you know it's not like there's music blasting it's just very- - yeah- that water feeling around you and that floating feeling. When I was in the Caribbean *I remember hearing while I was under the water a cruise liner starting-* that's not a nice thing to hear when you're under the water [laughs] that Whullllluuhhhhhshhh (sounds of a horn) the *big thing starts up and you're like "where did that come from?" and it's miles away from you-* but the fact that you hear that thing makes you think of what that might be doing to the under water environment- but um- yeah- the floating and *the silence*.

Lived Body

In each transcript, quotes relating to lived body (Corporality) were any statement where the participants talked about the ways that their **bodies influenced their interaction** with the physical or social environment (Van Manen, 1990). For participants from the swim program this included any quote illustrating the influence of their disability on the **ways that they used their bodies** as they engaged in physical activity in the water.

Rock star. Well I have to find different ways to adapt the activities that I do and I can pretty much do everything anyone else can it's just different- so when I swim *I feel along the lane ropes with my hand*, and when I'm *two strokes from the wall someone taps me on the head*.

Additional examples found in the transcripts were any quotes where participants talked about the ways that physical activity in the aquatic environment allowed them to **relate to their own body**.

Rock star. “It feels really amazing- swimming ***makes me feel fit & strong and when I’m in the water it’s relaxing*** and a way I can get exercise and it’s something that I can do.”

In the transcripts provided by participants associated with adapted scuba, quotes associated with lived body emphasized the experience of **weightlessness/ buoyancy**.

Blue Mermaid. “It feels good- ***neutral buoyancy right- that’s where you’re not going up or going down- you’re actually floating***. I think it’s a feeling that’s wild for anybody.”

Additional aspects of lived body in the scuba transcripts emphasized the experience of learning to **control and move their bodies in the scuba gear**. Something as simple as **breathing** using a regulator initially required a great deal of conscious control. The transcripts also emphasized the increased control that individuals with physical disabilities experienced. While in the water, individuals with physical disabilities are able to move their bodies in a different way compared to their movement and experiences in physical activity on land.

Blue Mermaid. You hear your own breathing- actually you know what ***you’re conscious of your breathing and you’re hearing your breathing and you become almost in tune with your breathing***- you hear your regulator- Shhh Phooooo- there’s something almost hypnotic about your breathing

Blue Mermaid. ***I don’t need my leg***- when I walk I do use my leg and I use a cane for balance and speed. Once I get going I have momentum- where as ***in the water well I***

don't need a cane and I don't need anything to lean on and that *freedom of not having an artificial leg* it's great.

Lived Time

In each transcript, quotes relating to lived time (temporality) were any statement where the participants talked about the temporal dimensions of their life, including **their past, present and future** experiences in physical activity both in and out of the aquatic environment (Van Manen, 1990).

Rock star. Wow- it's really *changed my life*- um- it's made me a much happier person to be able to come in and swim- be with my friends- um- made me much stronger & fit person so I can participate in activities at school. I can run and look like a normal kid. I've made so many friends on the team because it can be hard to make friends. ... *I'm definitely going to continue swimming, even when I'm older.* I'd like to work up to the Paralympics or some national times.

Quotes associated with lived time for the lived experience descriptions and interviews also included any quote illustrating the **pace** of their experiences while in the water which were influenced by the context (in a practice vs. in a swim meet).

Rock star. It's really just they're very similar but in a practice there isn't much to worry about you can be yourself and swim and do your best- um- it's also a lot more work- *in a practice you swim for a longer period of time.* The swim meets they're a bit faster pace. You're doing your best swimming but working much harder at what you do.

In the interview transcripts and lived experience descriptions provided by all participants associated with adapted scuba, quotes associated with lived time emphasized

the difference in pace between scuba and other forms of activity (like swimming) in the aquatic environment.

Blue Mermaid. The thing with *diving* and how different it is from swimming is that I shouldn't be splashing about in the water creating all kinds of stuff- it ***forces me to slow down*** where as swimming I can rip up a pool and it's different right- so that's the biggest challenge for me.

Lived Human Relation

In each transcript, quotes relating to lived human relation (Relationality) were considered to be any statement where the participants talked about the **relationships they established** through their experiences in the aquatic environment (Van Manen, 1990). Among participants from the swim program this included any quote that illustrated the relationships they developed with their team mates (team culture).

Rock star. My first day with the team was one of the best days of my life- I couldn't believe it- it was the first place that I had ever come to where I felt like a regular kid- had a place ***where I could come and make friends and be part of a team and yeah it was a place where I could be myself.*** When I stepped on deck I met my coach and she introduced me and ***everyone in the pool started calling me over wanting me to be on their relay team*** and fighting over who could have me on their team. ***I'd found a place where people included me!***

Additional examples included any quote where participants talked about their experiences attending a **swim meet**.

Rock star. Well the highlight for me- it only happens every 2 years but it's the **Ontario Winter Paralympic Championships and all of the athletes there have some sort of physical disability** and I go there- it's a swim meet and when I go **it's a place where I'm on a level playing field because everyone has a disability** and so when I swim I know my time is a real time, not a first because I'm blind and everyone else isn't- they adjust my time and compare that time with everyone in a certain category.

In the interview transcripts and lived experience descriptions provided by all participants associated with adapted scuba, quotes associated with lived relation emphasized the connection and relationship established with their **dive buddy**.

Blue Mermaid. I'm definitely focused **on eye contact and facial contact with my buddy**. Do I pay attention to the rest of the group? Yeah- I'll look around but primarily you know I'll maintain visual contact with- unless I'm put in a group of three...I'm more **aware of my buddy and making sure they're okay** and making sure I'm okay. We did a dive back in the St. Lawrence last summer and it was eye to eye contact all the way down.

Additional aspects of lived relation in the scuba transcripts emphasized the scuba culture, notably through the **socialization occurring before and after a dive**. Additional quotes illustrated the **on-going relationship between instructor and diver**.

Blue Mermaid. It's nice to be around people who are similar in initiative and in interest and then to have those people who are trained and willing to work with our own unique needs, who for example will coach me on how not to bicycle on my kick- to follow through with my knee- it's good in so many ways to have **that camaraderie- that friendship and that support** you know... **It's a common culture, common values**. Some

of the people I've met with disabilities who dive I have *stayed in touch with for a long time*.

Once a life-world existential table was created for each participant, the dominant life-world existential for swimming, scuba and for both aquatic activities combined were determined through the frequency of each existential. The summary tables provided below for each sport were created by counting the number of quotes for each of the life world existential in the tables for each athlete, significant other and instructor.

Among the divers, space was the dominant life-world existential appearing in 61 quotes across the interview and lived experience description transcripts.

Table 1
Diver Existentials

Name	Body	Space	Time	Relation
<i>BB</i>	6	8	1	8
<i>Chair</i>	12	11	2	8
<i>Blue Mermaid</i>	6	11	1	11
<i>Pinky</i>	5	8	0	6
<i>Squishy</i>	13	13	0	4
<i>Sunshine</i>	12	10	0	6
Total	54	61	4	43
Space Body Relation Time				

Among the swimmers, body was the dominant life-world existential appearing in 85 quotes across the interview and lived experience description transcripts.

Table 2
Swimmer Existentials

Name	Body	Space	Time	Relation
<i>Smiley</i>	11	9	1	2
<i>Bob</i>	11	8	2	9
<i>Missy</i>	8	7	2	11
<i>Rock Star</i>	9	14	4	10
<i>Dora</i>	15	14	2	13
<i>IDC</i>	5	5	1	7
<i>Tina</i>	15	14	0	13
<i>B-Rod</i>	11	10	0	15
Total	85	81	12	80
Body Space Relation Time				

Across both forms of aquatic activities, space is the dominant life-world existential appearing in 142 quotes across all interview and lived experience description transcripts.

Table 3
Overall Existentials Summary

Name	Body	Space	Time	Relation
<i>BB</i>	6	8	1	8
<i>Chair</i>	11	11	2	8
<i>Blue Mermaid</i>	6	11	1	11
<i>Pinky</i>	5	8	0	6
<i>Squishy</i>	13	13	0	4
<i>Sunshine</i>	12	10	0	6
<i>Smiley</i>	11	9	1	2
<i>Bob</i>	11	8	2	9
<i>Missy</i>	8	7	2	11
<i>Rock Star</i>	9	14	4	10
<i>Dora</i>	15	14	2	13
<i>IDC</i>	5	5	1	7
<i>Tina</i>	15	14	0	9
<i>B-Rod</i>	11	10	0	15
Total	138	142	16	113
Space Body Relation Time				

Using the life-world existential tables created for each participant in both aquatic activities, overall summary tables reflecting the themes and statements associated with each life-world existential were created. These tables identified the overlap between the life-world existentials. The contents of the existential summary table for both aquatic sports were then compared and used to create an overall summary table for the life-world existentials associated with activity in the aquatic environment.

Identifying key words in transcripts of interviews and lived experience descriptions was used as a secondary form of analysis for this study. A keyword is any word, phrase, or expression that appeared frequently in the interview transcripts (Van Manen, 1990). A keywords summary table was created for each participant illustrating the quote that contained the key word as well as identifying the location of that quote within the transcript, as well as identifying the dominant life world existential for that quote. Examples of the keyword tables created for one diver and one swimmer are presented in Appendix G.

Using the life-world existential tables created for each participant in both aquatic activities, overall summary tables reflecting the themes and statements associated with each life-world existential were created. These tables identified the overlap between the life-world existentials. The contents of the existential summary table for both aquatic sports were then compared and used to create an overall summary table for the life-world existentials associated with activity in the aquatic environment.

A secondary form of analysis performed using the interview and lived experience description transcripts was to identify keywords. A keyword is any word, phrase, or

expression that appeared frequently in the interview transcripts (Van Manen, 1990). A keywords summary table was created for each participant illustrating the quote that contained the key word as well as identifying the location of that quote within the transcript, as well as identifying the dominant life world existential for that quote. Examples of the keyword tables created for one diver and one swimmer are presented in Appendix G.

An overall keyword summary table was created by combining the contents of the keyword summary tables of each participant. The overall summary table is presented in Appendix H. Etymology traces the origins, formation and development of words (Onions, Friederchsen & Burchfield, 1996). Using the keywords presented in the summary table, the Etymological sources of each keywords was traced using several Etymological dictionaries to offer insight into the historical evolution and significance of these keywords (Van Manen, 1990).

Once the dominant keywords for both activities were identified, the Artifacts were then matched with the relevant keyword. The match up between keywords and visual Artifacts are presented in Appendix I.

Lived Body- Control

Examining the contents relating to lived body in each life-world existential table revealed that participants emphasized control as a key element of their experiences in the pool. **Control** was a dominant theme in relation to lived body. Aquatic environments provide participants with immediate **kinaesthetic feedback** allowing increased awareness of their bodies as they engage in physical activity.

Bob. “The reduced influence of gravity and the additional freedom for those with severe disabilities. It *feels slower to move in water than it does on land and the water gives feedback about their movement.*”

Beyond the impact of this kinaesthetic feedback, the aquatic environment is equipped with natural **sensory cues** (auditory cues, tactile cues) to facilitated independence in movement among those with sensory impairments.

Rock star. I have to find different ways to adapt activities that I do- and I can do pretty much everything anyone else can it’s just different so when I swim *I feel along the lane ropes* with my hand and when I’m two strokes away from the wall *someone taps me on the head.*

For participants with physical disabilities, movement in the water facilitated the opportunity to gain control over their bodies, “normalizing” their levels of physical fitness. After months of training, swimmers and their parents noted a significant **improvement in their physical fitness.**

Rock star. “Well swimming is a sport that anyone with any sort of disability can do and some people have said *it’s the only chance they’ll get to do any sort of physical activity* and it’s good to get them in there to be doing exercise.”

IDC. “She’s gotten better and stronger and that’s the thing because she does exercise classes and they say *she’s getting more exercise and it’s strengthening her hamstrings and tendons and muscles- it’s given her more strength* [training on the swim team] and that’s the most important thing.”

Changes to levels of physical fitness influence participants’ experiences **beyond the aquatic environment.** Participants note their improved levels of fitness influence their

experiences in physical education, free-play at home and in traditional therapeutic settings.

Rock Star. I feel really happy because I've been working out- I've been with my friends – I feel fit and strong. It's really changed my life- it's made me a much happier person to be able to come in and swim- be with my friends- ***made me a much stronger and fit person so I can participate in activities at school- I can run and look like a normal kid...***

Individuals with physical disabilities experience additional barriers to physical activity due to the physical limitations of their bodies. They experience difficulties specifically linked to their bodies and its ability to perform movements associated with specific skills in different sports. One benefit of swimming and physical activity in the aquatic environment is the **flexibility** it offers those with disabilities. Water and its unique characteristics allow individuals with a physical disability to determine how to move and use their bodies to achieve a specific goal. Different movement solutions allow multiple methods to arrive at desired outcome. Each SWAD is unique in that sense, using their bodies in a different way to swim each stroke. The impact of the flexibility in possibilities for movement is echoed among the divers.

Dora. I don't think she realized that you know moving her body in a certain way could you know turn into increased speed and achieving her goal of cutting off her time.... You know if I do this then I will improve and ***realizing that not kicking in the back stroke was actually going to improve her time*** it took me aback at first because you think you have to kick- being a normal human being ***you figure you kick then you go- but in her case you have to make exceptions and you have to work with what you have***

it's been really interesting how everything evolves and you know each swimmer is different which is amazing- you know *one can kick and one can't, and one has to use their left arm and one can't and it's like they all manage to do so many difficult things-* it's amazing to see!

Smiley. I kept getting stuck on the edges and the lane rope and one of my team mates kept talking to me and trying to help me to stop kicking- but I didn't hear what he was telling me because of the water. Finally, I heard what he was saying when he yelled at the top of his lungs. *I stopped kicking and got on my way- I was moving faster using just my arms.*

Squishy. Huge- not if it's a spinal cord injury they can't use their body on land or under water- but they can get into a different position without the effects of gravity- they can be in a *horizontal position* in the water and feel free *and move via their arms- moving 1 arm- via moving their head or via their buddy* helping them where as on land they would have great strain to do something like that- I think the biggest influence as far as mobility goes is the ease- *it's so much easier for them to move around once they get comfortable with the scuba gear.*

As each SWAD will use their body in a different way as they move through the water. As they learn new skills, each SWAD responds to different instructional strategies.

Tina. A new skill is difficult for them and *you have to try all different ways when you're teaching them* that skill and guaranteed *every kid is going to get it a different way* so you have to show them *by telling them, by demonstrating, by pulling them out of the water and physically doing it for them-* and you have to do it many many times.

Among the divers, control represented a dominant theme in relation to lived body. The first and most important task for a diver is to learn to **control their body** while under the water. Specifically, a diver must learn **how to breathe** while under the water using, an activity that requires minimal conscious effort on land is initially a task that requires a great deal of conscious control until they become accustomed to breathing using a regulator.

Blue Mermaid. “***You hear your own breathing-*** actually you know what *you’re conscious of your breathing* and you’re hearing your breathing and you *become almost in tune with your breathing-* you hear your regulator- *Shhh Phooooo-* there’s something almost hypnotic about your breathing”

Another aspect of their training is learning to control their bodies in the underwater aquatic environment, especially learning to **control their bodies while wearing all of the scuba gear.**

Squishy. Chair a paraplegic was gung-ho absolutely no nerves whatsoever... after our first session in a very small backyard pool he became super nervous. ***He was using his arms for balance which was throwing him off balance- so for him it became a whole new experience compared to land and for him it became very awkward*** because it was a whole new environment...***it took a long time for him to get to a point where he was comfortable with all the gear and feeling very confident.*** In our first open water dive his buoyancy was amazing- he just took off like a weightless little fish and was exploring this and that and I was amazed thinking back to our first time in the pool together with this very ambitious yet awkward person to full blown scuba diver. Amazing!

Sunshine. He realized that ***his legs don’t want to listen under water- so we have to tie them together.*** He had only one problem when he was learning to take off his mask

and put it back on under the water. And I think the problem was the control- *he couldn't control his body as he was worried he couldn't stay in one position but he learned* to do that and that was the biggest thing.

Lived Body & Space- Ease of Movement

Examining the life-world existential tables for each participant there was a significant overlap between the life-world existentials of body and space. The overlap between body and space emphasized the ease of movement within the aquatic environment. Many statements shared by participants in either form of activity emphasized the impact of movement in the water, specifically through the opportunity to experience **freedom to move without mobility aids**, which resulted in increased independence. The opportunity to engage in physical activity in the water facilitated additional freedom through the ease of changing position without the constraints of any mobility aids.

Tina. I prefer to see them in the water a lot more than I do on land because you know the water is where they belong... I see land as more strength building for older athletes and the younger guys I think it's really good because it helps with balance, agility, comfort with your body... *although in the pool it's easier for the SWADS to move- you don't have a wheelchair constraining you or a taper or things like that so in the pool we have more freedom.*

Dora. She's always been very comfortable in the water so that was never an issue. Well *she's very restricted when she's on land- she's very dependent on other people* transferring from one position to another, from one location to another... in the water she's very comfortable- she'll go from one stroke to another and even though she can't

get into the water and out of the water on her own... *in the water it's total freedom- just being able to walk without the walker and without any restrictions* it's wonderful and she can right herself if she tips over and she can just get right back up and continue walking.

Blue Mermaid. I don't need my leg- when I walk I do use my leg and I use a cane for balance and speed. Once I get going I have momentum- where as *in the water well I don't need a cane and I don't need anything to lean on* and that *freedom of not having an artificial leg* it's great.

Squishy. Some people with disabilities may have been divers before their disability and would like to re-try, the other reason I see [individuals with disabilities get involved in diving] is out of a sense of fear- that may sound weird but *it's a fear of being stuck in a wheelchair without the freedom of motion that re-motivates them to really want to try as under the water they're weightless* and for an able-bodied person that's phenomenal- *for someone who thinks that they're confined to a wheelchair for the rest of their life it's even more amazing.*

Many athletes emphasized the contrast between movement in the water as compared to the **effort** required in physical activity on land. For individuals with Cerebral Palsy, movement in the water (especially warmer water) was much easier than similar movement on land.

Missy. "It's *harder to do physical activity on land because my muscles are tighter* and I get tired easier on land. *I'm not as tight when I'm in the water*"

Smiley. "I can do more in the water than I can do on the land- I've always enjoyed it [being in the water]! *It's a lot easier [to move] in the water and you can move around more-oh-and I can walk in the shallow end!*"

Tina. Sometimes they're surprised by their results- I know a lot of times they are because when I give out a ribbon they're like "I got first place?" or "I did a best time?"- they're surprised. I find that with ***CPs in particular they have very low ability to judge how fast they're going*** so they're surprised quite often.

Examining the divers' perspectives added additional details to shape understanding of the ease of movement in the aquatic environment. Divers highlight the effortless nature of movement highlighting the impact of the specific **context** such as the impact of **currents, depth and amplitude of movement** on their experiences under the water.

BB. "You can ***on land use a wheelchair and move around*** a little bit. Under water you're not depending on how well you swim you still need assistance but ***if you control your buoyancy and there is a current then you can basically travel around on your own.***"

Chair. Effortless under water- totally effortless. ***If you swing your arms in a motion- for like one stroke will move you 15 feet under water- one stroke- Zoom- and then just go for a ride like a missile- you'll glide for 15-20 feet depending on the current you're in. But it's effortless- there's no effort in it-*** you're not in a hurry- under water you're there to explore so you're not trying to race from this end to that end of the pool... time slows down and everything slows down. ***On land it's a pain- it's effort- you have to put a lot of effort into getting there-*** like you can't just turn- like ***in the water you can turn any way you want – you can look up, down, stand on your head, stand up straight – whatever you want.*** I feel like a handicap on land- I don't feel like a handicap in the water anymore- I feel like a normal person...

BB. “I find *the deeper you are the easier it is to move and clear air*- but again you do have to keep track of your air, your depth and the time because *the deeper you are the less time you can stay down.*”

Beyond the ease of movement while in the water, participants in competitive swim programs allowed individuals with physical disabilities to engage in an activity that resulted in a cardiovascular work out which affected **every part of their body**. Among the divers, movement underwater allowed them to enjoy participation in physical activity **without experiencing any pain or frustration**.

Dora. The exercise- *they need the physical exertion they don't get that in any other way*... it's sink or swim in the deep end – they need to keep going or else they're going to sink... *it's enough to get their hearts pumping* and that's the thing *they don't get enough of that in any other activity*- they don't have the wheelchair to sit on- *they're actually using every part of their body*... it's always a part of them they're working.. it's so necessary for them!

Sunshine. He definitely *has more freedom under the water (than he does on land)*. It's a different experience- it's a total new world under water. *It's not like on land. There's not as much physical- um- pressure on his joints and muscles* but even if you get tired he *doesn't have as much pain because he complains of pain* in his bones *on land*.

Blue Mermaid. *On land- mastery is an issue*- I'm not going to play tennis. I mean I could but it's going to be pretty bad and *I'm going to get frustrated* so mastery is difficult *especially in sports that require running and mobility* and things like that. Walking I will do just because I am in need of something to help in stress reduction- but again I do it *and it's more of an effort. It takes more effort and again it's not as easy.*

To be honest I've done a number of things- but *the mastery thing it just comes easier for me in the water than it does on the land.*

A unique aspect of the ease of movement emphasized by all those involved in diving reflects the nature of movement under water compared to movement in the water (swimming). A major component of diving is buoyancy control, as the goal of diving is to engage in an aquatic activity under the water's surface buoyancy control assists the divers to submerge and remain at a specific depth while in the water during a dive. Many of the divers explain buoyancy as feeling "weightless".

Blue Mermaid. It feels good- *neutral buoyancy* right. **That's where you're not going up or going down- you're actually floating-** I think it's that feeling for anybody that's wild- I have learned through my advanced course to really master that. I've had people say, and able-bodied divers say "wow- you're really comfortable in the water with your buoyancy" you know but it's with practice and comfort in the water.

Squishy. "Hovering- once they're weighted properly. It's not absolutely effortless in that sense. **Most divers with disabilities love the feeling of being weightless-** it's something they positively enjoy – **it's like the feeling of flying** in some aspects."

Pinky. If someone can't move on dry land- a quad can't move then they can't move under water- it's not like they're in water so they can suddenly move- if they're paralyzed then they're paralyzed. Things that you don't have to worry about that you have to worry about on land are pressure points... **being under water it's all about maintaining neutral buoyancy-** it's not about **a race it's about hovering and that's what anyone needs to achieve. You're in a weightless environment- you are weightless in the water when you have achieved neutral buoyancy...**

Lived Space- Context

Swimmers acknowledged the impact of the aquatic environment as an alternative to traditional therapeutic settings (such as physiotherapy). Participation in weekly swim practices offered an **alternative venue for physiotherapy**.

Tina. There's many different reasons [swimmers join the team]- their parents think it's a good idea to have physical activity, they *don't have to go to as much physiotherapy- they can come to two hours of swimming and miss a physiotherapy session that week and not have to go as much* because they don't like physio and our program has their friends in it and there are other kids in the program and it's playing exercise.

Compared to swim lessons, a swim practice **maximizes** the duration of their physical exertion. In a swim lesson, individuals with disabilities spend a great deal of time on life-saving skills and waiting their turn for 1:1 interaction with the instructor. Participation in a competitive swim programs emphasizes cardiovascular fitness and encourages physical exertion throughout the duration of their time in the water presenting participants with different drills and pace times.

Dora. Definitely the length of time because *in lessons she was in the water for half an hour- twenty minutes actually swimming for 10 minutes because of instructions and waiting her turn-* when this came along it was a godsend... it was an hour straight of swimming and getting her heart rate up and she doesn't have the opportunity to do that normally.

Another aspect of the aquatic environment that appeared in transcripts and existential summary tables of all involved in scuba emphasized the contrast in their

experiences in a dive in the pool compared to a dive in the open water. While the pool is a controlled, confined environment allowing divers the opportunity to learn and practice skills, the open water offers diverse underwater environments to explore. While in the open water divers encounter various forms of wild life and must wear additional protective equipment.

Sunshine. Open water there's more things to look at, to see seaweed and the fish and the different things they sank under the water. I get just as much joy in a pool because you're still contained in water- there's that weightlessness- you're floating- *you get your training in the pool but you go to the lake/open water to see things* and it's a bigger body of water so you need to know how to get around.

Squishy. The pool is controlled and confined and you don't have to wear hoods, gloves and extra exposure gear on top of the wetsuit, it seems simpler and then you go to *open water you have to add gloves and hoods- it's open water!* Even the term just sets people off a little bit- most people hop right in there with a big smile on their face but you can tell they're apprehensive or nervous. Here in St. Catharines area the *water tends to be a little green- well not always murky but green definitely.*

Lived Space- Exploration

Examining the statements associated with space in all the life-world existential tables for all participants associated with the adapted scuba emphasized the experience of **exploring** the under water world. Many of the participants emphasized that while under the water for a dive it allowed them to enter and explore a whole new world.

BB. If I ever travel somewhere I can go diving there- it's a whole different world down there. It's a highlight every time I go down! You know when *you see something different*, or try something new- you never know what you're going to see- especially in the Caribbean- there's *all different fish*- schools of fish coming along and all of a sudden you're surrounded by all these fish ...to see things like that or a sea turtle or whatever you see, and the colors are just phenomenal.

Rock Star. "What I love about diving is we have a cottage and *I like to go to see along the bottom and explore under the water* and now I can do that for longer periods of time."

Sunshine. We went diving and it was *raining outside*- the weather was miserable and we didn't know if we would be able to get him to the edge to get him into the water it was so muddy. So myself and the trainer what we did was we got him out of his chair and we just pulled/slid him through the mud down the water's edge. *We went under water and it seemed just like a sunny day*- because it doesn't matter under water if it's raining on top- you don't really see it under the water. We were down for about an hour and I couldn't believe how much fun we had!! Usually he's in pain when it rains because his joints hurt- but he didn't feel it under water so I love this experience. You don't feel miserable- you know when it's cloudy out you get sad, you go under water and you forget about everything. You know when you have stress you think about it- you go under water you just think about your air, you check your gages- *it's like a mini vacation*. For me and for him it's the same, and I think it's the same for all divers. It gets them away.

Chair. "*It's a whole new world under water*- it really is! It's hard to describe because you are so free- *the fish are inches away from you* and my initial thought was "Ah! The fish are going to bite you!" but no they aren't going to bite you!"

Lived Space & Lived Relation- Equality

Examining the life-world existential tables for each participant there was a significant amount of overlap between the life-world existentials of space and relation. Many statements in the interviews emphasized that swimming allowed individuals with physical disabilities to feel like they were “**on par**”/ a sense of **equality** with all others in the water. This is in part due to the inclusive nature of the team, where there is a mix of able-bodied and SWAD swimmers in each lane. This swim team is an excellent example of a successful inclusive environment that allows members of the able-bodied population to gain an accurate understanding of disability through a mutual interest.

B-rod. I remember a couple of years back I couldn't stand the coach- ***I didn't like it because the team was segregated. We had able-bodied and disabled swimmers*** on the team. ***SWAD swimmers had lane 6 and everyone else had all the other lanes-*** ***everything was separate, able-bodied didn't talk to the SWADS*** and a couple of the slower swimmers [like myself] were put in lane 6 with them and hated it because I didn't want to swim with the disabled kids- they couldn't swim as fast as us. ***Eventually I started to get to know the kids with disabilities on the team and becoming friends-*** ***before that experience I didn't understand disabilities-*** I didn't have the personality to be accepting- the way things changed after being around them made me forget people have disabilities. If someone walks in without a leg I don't notice. Really the only time segregation is good is when you're working on technique...people shouldn't feel different. ***On the team we have many different types of disabilities who all swim together and work together- we all swim together in the same way- we work together-***

we've gotten used to it- on the old team we had a lot of issues with able vs. disabled swimmers- we weren't a family... Integrated swim teams *the able-bodied learn from the SWADS and the SWADS learn from the able-bodied team members- it's not a swim team with disabilities- it's all abilities. Once everyone gets into the pool we're all together- we're all perfectly able. Everyone is on equal ground-* eventually we're all on equal ground.

Tina. When I first joined that was one problem I felt like *we weren't a group-* I don't feel I worked really hard on making that happen- but it has happened and they do it- I thought I would have trouble having the able-bodied swimmers help out or be involved in the lives of the SWADS- *they are one and the same-* if anything the able-bodied kids like hanging out with the SWADS more than each other... *they have fun* with them.

Swimming provides individuals with physical disabilities the opportunity to experience a sense of equality allowing them the opportunity to participate as **part of a team.**

Rock star. A friend told me about the team here and I came out and tried out and the first day was one of the best days of my life- I finally *found a place where I felt like everyone else and was included. I learned that there were places I could go and participate in activities* just like another kid- *I wasn't any different- I was just one of everyone else* you know it gave me a chance to get some physical activity and feel fit & strong and happy about myself in general.

Swimmers with disabilities experienced a sense of equality in their experiences attending meets and **competing with other SWADs.**

Rock star. Going to swim at the Provincial Winter Paralympic Championships and *all of the athletes there have some sort of physical disability* and I go there and it's a swim meet where I go and *it's a place where I'm on a level playing field because everyone has a disability* so when I swim I know my time is a real time and not a first because I'm blind and everyone else I swim against isn't- they adjust my time and compare that time with everyone in a certain category.

Divers emphasized that equality was apparent through the process of training and the importance of adhering to the safety guidelines. All divers are exposed to similar **training** in their courses and must adhere to the same rules for their own safety. Beyond the similarities in training, all divers require the same basic **equipment** to allow them to enter the underwater world.

Pinky. First of all *the classroom stuff- that doesn't change* whether you're able-bodied or disabled. The classroom is the same. *It's the same for anybody- if you're on a boat the captain tells you what your routine is going to be- there's no difference* in terms of what kind of diver you are.

Squishy. The first thing we teach a diver is to get excited and learn to have fun- that's what it's all about- learning to enjoy it...The first things we teach certainly revolve around safety whether in a pool or in open water *they need to learn how to clear flexible air spaces- that includes your lungs, as well as the air inside their mask because if you don't learn to do that then that can cause damage to eyes and their blood vessels*, lungs can cause an air embolism.

Individuals with disabilities involved in adapted scuba require the same **equipment** for a dive, they will however make adjustments according to their disability

and what set up of their equipment is most comfortable for them. Comfort in their equipment is a key aspect of diving for all participants, not just for those with physical disabilities.

Blue Mermaid. I use pretty much everything everyone else does- except this year because I did some diving in Ontario *I have a custom fitted wetsuit that doesn't have two legs*, which is good because it's custom *fitted to my one leg and to my stump* and has a purge valve on the bottom so I can release all the water. I don't need two fins...

BB. "Well everybody needs a mask, fins and a wetsuit. Those are probably the basics depending on the person..."

While in the water and under the water for a dive an individual with a physical disability **blends into the group**. Diving itself minimizes the visibility of a physical disability by allowing individuals with disabilities to engage in activity without their mobility aids. This facilitates interactions with other divers who are often unaware that a diver has a physical disability until they exit the water.

*Chair. It doesn't feel like my body- because being a paraplegic for 27 years now my body it just sits there – it doesn't do nothing. Under the water it's not sitting- it doesn't feel like it's there- it's so free. It's just freedom from being a paraplegic. It's freedom because nobody knows but me and the person that's diving with me- my partner because you never dive alone- you always have a buddy...It's so much freedom under there it's hard to describe-*there's no handicap under water*- that's the thing- there's no handicapped people under water. *Everybody is the same- there's no difference between John, George, Sue- we're all the same!* Like if you came up to me and looked at me and I was under the water I don't look any different than you do. And then when*

we get on land and people look and say “you’re in a wheelchair!” it’s really that initial shock- in fact *when we dive at the quarry my wheelchair is at the top- they don’t know which one is the wheelchair dude- they have no idea until we get back on shore-* and then they’re “oh- you’re the one in the wheelchair- I wouldn’t have known-you swim like a fish!”. So everybody is the same under water- there’s no difference.

Lived Relation- Culture

The team **culture** represented a second area of overlap between space and relation. Many statements in the interviews emphasized that the team culture was a key element of the relationships they develop through swimming. Support from teammates helped all members of the team work through a challenging set, stay on track during practice and enjoy their time in the pool.

B-rod. When you swim too hard and burn yourself out *your team mates keep you going- it’s not your passion for the sport it’s the people around you that keep you going.* When you’re on a team *you bond-* you get to know them through and through- you see each other regularly and spend a lot of time together- most of the time you’re not talking but you’re together.

Rock star. It’s made me a much happier person to be able to come in and swim, be with my friends... it’s made me a much stronger and fit person so I can participate in activities at school... *I’ve made so many friends on the team because it can be hard to make friends.*

Tina. “They’re definitely buddies- *they’re all supportive-* they poke fun at one another but they talk about school and for a lot of them *this is their social life* and what they do for fun after school.”

One interesting aspect of the team culture for several members of the team was the opportunity to share a **common interest with their siblings**. Several participants are on the team along with their siblings, some even train in the same lanes.

Tina. “I think *it’s beneficial for both of them...* I think *for the SWADS it’s nice having their siblings there* because they’re not special and they’re doing something together.”

Dora. “...they don’t compare times or anything like that- it’s just good company... they have their own groups- they do talk about it... *they have something in common that they can talk about.*”

Unlike the swim team culture that is limited in **size** and tied to a specific group of people involved in a common activity through a specific **location**, the dive culture itself is diverse and linked through a number of venues: dive shops, face book groups and dive organizations. Because individuals involved in the dive culture have such diverse backgrounds, it is their interest in diving itself that fuels the nature of their interactions with other divers.

Pinky. They’re there to be a diver and be a part of that group and to explore... to be a part of a group- it’s a misfit factor. *Whether you’re able-bodied or not, the scuba group/ scuba divers we’re for the most part a very accepting group.* It’s one of the few sports or activities that I’ve been involved in that it doesn’t matter anyone’s backgrounds and probably one of the most diverse groups of people with diverse backgrounds who dive. *You get divers together and start talking about diving- there’s no barrier. Everyone has that passion-* diving is a very passionate sport- just belonging to that is cool for anyone- but to be a part of a group.

BB. “Diving is *becoming more of a sport for lot of people, able-bodied and persons with disabilities, it’s the same.* It’s a different world down there- and it’s not something everybody gets to experience.”

Blue Mermaid. It's nice to ***be around people who are similar in initiative and interest-*** people who are trained and willing to work with our own needs. It's good in so many ways to have that ***camaraderie, that friendship, that support*** you know...***it's a common culture, common values,*** some of the people I've met with disabilities who dive I have stayed in touch with for a long time.

Unlike other activities, like swimming where the instructor is always in a position of authority, in the dive culture once a diver is trained there is an on-going relationship with their instructors. Whether they choose to continue to take additional courses or they continue to dive together through the same dive shop instructors provide divers they have taught support and encouragement to continue to enjoy their experiences in diving or by sharing equipment.

Squishy. "By showing them enthusiasm. I think ***sharing experiences*** in a lot of cases, most instructors continue to dive with students even after they're certified- it becomes an ***on-going relationship and we can explore all different aspects of Scuba diving together.***"

A major component of dive culture is not the dive itself, but rather sharing resources and equipment with other divers to allow more individuals the opportunity to experience the underwater world.

Sunshine. "We've been ***borrowing a lot of equipment*** and over the last year we've been buying. Our instructors were nice and we didn't have to pay for anything."

A major component of dive culture is the prominence of narratives of their adventures in the underwater environment. Communication is difficult under water, many divers (with the exception of Deaf divers who know ASL) must wait until they return to the surface following a dive to share what they saw when they were under the water exploring.

BB. “I’ve met lots of new people and it’s *always nice to talk about with people who have mutual interests* and it’s something everybody is interested in. *Even the people that don’t dive it’s a topic of conversation*, trying to get them into it.”

Chair. “*You get on the surface you’re like- hey-man- did you see that under water-* you have to write everything down. Because when you’re under water you can’t use your language to communicate.”

BB. “I’ve done more traveling in my life in the last couple of years that I’ve ever done in my life. You look forwards to it a lot more and *it gives me something to talk about with other people and divers- you tell people what you’ve seen*”

Sunshine. *We catch up- we share stories, talk about new equipment*, look at new equipment, talk about where we’re going to go, plan a route, how long we’re going to be under water, joke around and relax. *After the dive everybody makes a big BBQ- or if we don’t bring food with us we go to a restaurant- even if you go for an hour long dive it’s like a 5 hour long event.*

BB. “We usually *come up and get out of the water and say- “did you see this- did you see that?” or just kind of talk about the dive for a bit-* just like talking about other sports- like watching a football game”

Unlike many other forms of physical activity, diving is an activity where helping others is a natural component of the experience. Using a dive buddy, each diver is responsible for helping their buddy gear up and ensuring that their buddy’s equipment is in working order before going under water. During a dive the divers are each responsible for their buddy’s safety and if something should go wrong they trust that their buddy will be able to assist them to the surface and to safety. A great deal of trust is involved in diving.

Blue mermaid. There’s a lot of social connection and interaction and primarily though *focused on helping each other gear up-* make sure you’re okay- making sure you’re doing what you’ve got to do- *helping other people do up the zipper on their*

*wetsuit... even with able-bodied divers... **they're all helping each other so they don't mind helping me.***

Squishy. We have a young lady who's an above knee amputee here and some of our divers didn't know and they were helping her out in the water one day with her fins- she put her one leg up and he said "give me your other leg" and she said she didn't have another one and she started laughing saying most people don't know when she's diving- but ***by accepting her and making her feel welcome and helping her when she needs help with things we don't normally think of-*** like someone to carry her artificial limb and ***give her a little extra help when she needs help.***

Chair. "Now I had an ***opportunity to get my scuba license for FREE-*** so that was even better and ***so the wife and me got our licenses and so now we're each other's partners*** because you never scuba dive alone."

Sunshine. "The friendships you build with other divers, ***everyone is friendly and helpful- we depend on each other- like our lives depend on each other-*** that's why we're so nice to each other."

Lived Relation- Accomplishment

Examining the contents relating to lived relation in each life-world existential table revealed that participants emphasized accomplishment as a key element of their experiences in the pool. Accomplishment was a dominant theme as some members of the **general population** are **unable to swim** and are **afraid of the water** and will never explore the underwater world.

Dora. I think she's very satisfied with what she's achieved- it's a sense of ***accomplishment for her knowing some of her friends that are able-bodied can't swim and she can... she goes to the swim meets and she competes*** and she gets to compete which ***there's no other program that she's been involved with that she can compete in.***

Participation on a swim team allowed individuals with disabilities the opportunity **for competition (swim meets)**. Some swimmers enjoyed the opportunity to brag about how they placed in a race, while others were content with swimming a personal best time.

IDC. The first swim meet just going out there and being involved- seeing the other kids with disabilities can do the same thing she can- it might be a different disability but it shows her that she can do it- *she can talk about it at school and the other kids are like “you swim 50 meters?”- she likes to boast or to brag that she finished first or second*

Bob. I tried many different sports- basketball, soccer, track & field and swimming was the one that fit. *Swimming was a good fit because I am able to take it to a higher level*, some of the other programs opportunities to compete aren't offered for people with disabilities and in swimming *I have been able to compete with the best in the world.*

Dora. She was *so proud of herself after she swam her first 100 meter freestyle- they gave her a time of 10 minutes and she swam it in just over 8 minutes* so she was increasingly quicker every 25 meters- so it was okay- you're a long distance swimmer- your goal is to swim across lake Ontario. She was so proud of herself and couldn't stop talking about that.

BB. “*It's a completely different world down there and it's not something that everybody gets to see.* For different reasons *some people prefer the water, and others will never get to see that and we get to!*”

Pinky. “*Every environment is a different experience- everything has something special about it-* just the fact that we're not created to be down there it's even cooler!”

Lived Time- Pace

In contrast to swimming, the goal of a dive is not to race and compete with other divers in their group. One benefit of diving is the amount of time it allows individuals to spend exploring and interacting with the underwater environment.

Blue Mermaid. “The thing with **diving** and how different it is from swimming is that I shouldn’t be splashing about in the water creating all kinds of stuff- **it forces me to slow down...**”

Chair. Once you’re **under water the rest of the time everything stops** and waits for you- **it goes really slow-** ‘cus you’re down there for 40 minutes but it felt like you were down there for 2 hours because **everything just slows down and you’re not in a hurry anymore- you’re stopping and you’re looking and floating around...**

BB. Well I guess the very first time I was down diving in Bonaire we were on a boat with a group and I was one of the first Quads that had a trainer go down there...we got the feeling the first day that everybody didn’t want to be too close... we went along in the dive and we were following them and it started to be the other way around- we weren’t following them- they were following us and **we started slowing down and watching things** and found an eel poking its head out from under a rock.

Chair. **You’re not in a hurry-** under water **you’re there to explore so you’re not trying to race from this end to that end** of the pool. Under water, you’re there to explore so you’re not trying to race from this end to that end of the pool, trying to beat your buddy. You’re trying to look at everything, **time slows down, everything slows down.**

Unfortunately, compared to other forms of activity in the aquatic environment, divers can only spend a limited amount of time under the water before it becomes a danger to their health.

Chair. It's just exhilarating and you can't wait to go again. ***But you can't dive and then come up and then dive again- you have to have time in between*** when you dive ***because if you don't then you're putting too much air into your body and it can give you the bends.*** And that's another thing you learn- okay- if I dive now at 35 feet and I'm going to dive in an hour at 20 feet, how long can I stay down? And you have to figure all that out- because if you don't and you dive too often then you get the bends because you get too much air in your blood stream.

Indigenous Typology- Barriers

In comparison to swimming, there are a greater number of barriers that prevent an individual with a disability from continuing to dive once their training is complete. The cost of the training and the equipment itself is quite high, however there are organizations that attempt to offset the cost in the hopes of increasing the number of individuals with disabilities involved in adapted scuba. In the case of Chair and his wife Sunshine, their dive instructor offered to offset the cost of their training to overcome a common barrier (economic barrier) preventing many individuals with disabilities from learning to dive or getting involved in different forms of physical activity.

Sunshine. Well ***a guy approached him in the streets and asked him in the streets and asked him if he would like to be trained to scuba dive and offered him free lessons*** and he came home and told me I thought it was just a joke- but the guy called again and asked if he has a wife and offered me free lessons because everybody needs a buddy and it's difficult to coordinate a dive if you don't have someone close to you willing to act as your buddy.

Chair. Actually it was 2 years ago I was at a Fireman's carnival and ***this guy was yelling at me "hey you- hey you", and he chased me down the street and asked me if I'd ever been scuba diving before*** and I said no and he asked me if I ever wanted to and I said I'd never thought of it and he ***said he'd like to teach me for free.*** He told me his name and he offered to teach myself and my wife for free.

Beyond the economic barriers that may prevent an individual with a disability from getting involved in adapted scuba, they also require someone willing to act as their buddy. In the case of BB, who is a quadriplegic he must have two individuals who are certified rescue divers willing to act as his buddy.

BB. I've done a lot of diving with my trainer, it's ***difficult to find another person to dive with the correct certification-*** we're still working on that. I've done enough dives for my certification. ***Just to get trained in diving is one thing- but you've got to keep it up-*** if you've learned it but you're not diving- then what? ... ***I'm looking for another certified person to dive with. A lot of people don't mind- but your times have to match*** and that kind of thing. Availability and when you're going to dive.

Blue Mermaid. Diving it's not for everybody- I think the reason I got into it was ***the group*** Club Challenge they ***helped offset the cost- which is a huge barrier to participation for people with disabilities- so they lent you equipment and they helped offset the cost of the trip and the reduced the cost of certification*** recognizing that cost is a barrier not just for able-bodied but for individuals with disabilities who might be on limited incomes. I think ***another issue is access to transportation- you need a car and someone who will get you to where you're going or go with you-*** or buddy up with you... some people with disabilities are lonely so diving might be a solution.

Keywords Analysis

The keywords summary table provided in Appendix A reflects the quotes illustrating the experience and meaning of physical activity in aquatic environments for individuals with physical disabilities. Etymological dictionaries provide information on the cultural root and influence in shaping the meaning of each of the key words appearing in the interview and lived experience description transcripts for all participants.

Equality and Freedom were the two prominent words that appeared in the transcripts frequently associated with lived space and lived relation. The word Equality stems from the Latin word *aequantitas*, which in translation means an “evenness of mind” (Klein, 1966). One method of coping with a physical disability is emphasizing the role of the mind and minimizing the role of the body.

The visual Artifacts provided associated with equality emphasized the ability of individuals with physical disabilities to blend into the group symbolized by a group of colourful fish. Some fish have smaller fins, one fish is wearing a life jacket. Each fish has its own difference just as all swimmers and divers are different, but when in the water they’re all able to share in the same experience.

The word Freedom emerged in 1200 combining the old English words *freo*. Freedom itself is a root word from the word *free*, meaning an individual that is not in bondage, or subject to control from the outside (Onions, Friederchsen & Burchfield, 1966). For individuals with physical disabilities gravity is a factor that controls the ways that they can move their bodies. While in the water, their bodies require less effort to overcome gravity. They are not as reliant on their mobility aids which control the ways that they can interact with their physical environment on land, most notably through the

physical accessibility of the environment. While in the water, individuals with physical disabilities are not subject to control from the physical environment and accessibilities and are free to move about independently.

The visual Artifacts associated with freedom reflect the opportunity for individuals with disabilities to engage in physical activity without their mobility aids. Wheelchairs are not necessary in a dive to explore the under water world and are left on the shore lines empty during a dive.

Participants in both swimming and scuba emphasised a sense of Comfort while in the water as a key element of their experiences in the aquatic environment. The word Comfort emerged from confort, an old French word and from the latin word confortare. Relevant interpretations of comfort can be associated with encouragement, support and a cause of satisfaction (Onions, Friederchsen & Burchdield, 1966).

While in the water individuals with physical disabilities are encouraged to continue to engage in physical activity by the ease of movement in the water. The dive culture and team culture are major sources of encouragement and support for individuals with physical disabilities.

One significant keyword appearing in the lived experience description and interview transcripts for swimmers and divers was Accomplishment. An accomplishment is an ornamental attainment, derived from the French word accomplissement (Onions, Friederchsen & Burchdield, 1966). For the divers and swimmers to learn to be comfortable and move in the water is a major accomplishment. In the case of diving, the few people have the opportunity to explore the under water world, and many would not suspect an individual with a severe disability (such as quadrapelgia) would be a certified

scuba diver. For the swimmers, many of their peers at school are unable to swim.

Individuals with physical disabilities encounter numerous barriers to becoming involved in physical activity. The fact that they are able to learn to dive or be a part of a swim team and compete at meets is a major accomplishment.

Many of the visual Artifacts provided support the notion of accomplishment as a significant component of the experience and meaning of swimming and diving for individuals with physical disabilities. A collage with diverse images of individuals with physical disabilities involved in physical activities like rock climbing and skate boarding illustrates that swimming is one of many potential activities allowing them to attain success and achieve their goals.

In a series of drawings, one swimmer illustrates what it will take to achieve his ultimate goal of winning a Paralympic medal. To achieve his goal it will take both mind and body working together. With a smiling face, one image shows the pride on a swimmer's face after swimming a personal best time at a meet. Accomplishment is the key word with the most visual Artifacts.

Numerous quotes from the lived experience description and interview transcripts emphasized physical activity in the aquatic environment as an Effortless activity for individuals with physical disabilities. The word Effort is derived from the old French word *esforz*, which branches off into *esforcier* and *esforcer* meaning, "To force, or reinforce" (Klein, 1966). For individuals with physical disabilities, movement in the aquatic environment reinforces the idea that it is possible to participate in physical activity with any level of skill. Many individuals involved in swimming and diving

emphasized how their experiences in the water made them interested in getting involved in other forms of physical activity on land.

Effort is also derived from the vulgar Latin word *exfortiare* which means “to show strength” (Klein, 1966). For individuals with physical disabilities, participation in adapted swim or scuba allows them to challenge dominant social views that place individuals with disabilities as weak and dependent.

One prominent keyword limited to the lived experience description and interview transcripts of the participants associated with the adapted scuba is Explore. The word Explore emerged in 1585 and is a back formation of exploration influenced by the middle French word *explorer*. The French term is borrowed from the latin word *explorare* which means to investigate or search out. Explore was initially a hunter’s term meaning “to set up a loud cry to scare an animal from its hiding place” (Barnhart, 1988).

There is a great deal of stigma associated with physical disabilities in western cultures. The attitudes individuals experience when they go out and engage in physical activity in their communities are negative experiences that cause individuals with physical disabilities to go to great lengths to match “normal” able-bodied individuals. Individuals with acquired disabilities are especially sensitive to this stigma and may go into hiding in the privacy of their own homes. For individuals with acquired disabilities, the ability to engage in an activity that allows them to interact in an environment without their wheelchair or mobility aids is enough to make them come out from their hiding places and get involved in a program.

The visual Artifacts reflect the appeal of exploring the underwater world while diving. One image illustrates the interaction with nature, the seaweed and the fish while

under the water for a dive. Another image illustrates the beauty of the open water environment in a dive in the Caribbean. Both emphasize the diversity of the under water environment that allows individuals involved in adapted scuba to explore each time they go for a dive.

One prominent keyword limited to the lived experience description and interview transcripts of the participants associated with the adapted swim program was fun. While there are no derivatives for the word fun, the meaning of the word is associated with a diversion (Onions, Friederchsen & Burchdield, 1966). Given that many of the swimmers are adolescents, the idea that swimming offers them a diversion from the pressures they experience with school, their parents and their interactions with medical professions is important. While in the water for a practice they are able to forget everything else and become a swimmer.

The visual Artifacts reflect this aspect of their experience in the water. One image presents the swimmer alone in the water during a practice while her coach looks on from the deck providing her feedback on her technique. Another image is of a lone swimmer in the water playing with a beach ball and floating on a noodle with a big smile on her face.

Limitations

The participants in this study reflect the experience of acquired and congenital physical disabilities. Future investigations could pursue participants with progressive forms of physical disability; this would yield additional description of the experience and meaning of physical activity in the aquatic environment.

All methods of data collection used in this study rely on self-report data from participants. As a result, the data in this study is limited to the information participants

were willing to share about their experiences in the aquatic environment. Participants may not recall certain events or may not be able to convey the significance of their experiences in the aquatic environment through language.

There is a large gap/difference in age between the swimmers and divers with disabilities involved in this study. One issue with this age gap is the difference in development, while the swimmers are all adolescents, the divers are all middle-aged. While the swimmers are still dependent to a great extent on their parents as care givers, their parents still have an influence on the types of programs they are involved in. As all of the divers are middle-aged, they may be in the role of care giver to children, their spouse or to their parents. There are no external forces causing them to participate in any form of activity, where as the swimmers may be involved in swimming because their parents sign them up for the team. Future studies would benefit from posting a flyer in the facility housing the adapted swim team and recruiting individuals with physical disabilities involved in diverse forms of adapted swim programs (lane swimming, swim lessons and an adapted swim team).

In qualitative research, the researcher takes a major role in the outcome and process as she is the one developing the tools that will be used to gather information. I possess a strong background knowledge of adapted swimming as a former SWAD swimmer and coach of SWAD swimmers. I have no training or background in adapted scuba and as a result the interview guides asked several background questions about training and the nature of the activity itself. Future investigations where the primary investigator has a background in scuba may yield additional aspects of the meanings of diving. Relatively few studies exist examining the experience of diving, even among

able-bodied divers. Future phenomenological research with able-bodied divers could yield additional information about the essence of scuba as many participants provided phenomenal descriptions of the sensory experience of the under water world during a dive.

This study focused on two forms of programming in the aquatic environment: adapted swim and scuba. There are many other forms of aquatic programming such as synchronized swimming, water polo and diving that could be explored to add to the experience and meaning of physical activity in the aquatic environment for individuals with physical disabilities.

One final limitation in this study is the cultural diversity of the informants. The language and symbols provided by the informants reflect the linguistic preferences of North American Culture. Future studies would yield additional insight into the meaning of physical activity in the aquatic environment seeking out the language and symbols used by other cultures.

CHAPTER 5- DISCUSSION

The purpose of this study was to develop a deeper understanding of the lived experience and derived meaning of physical activity in aquatic environments for individuals with physical disabilities. Discussion of the main theoretical models of disability in the introduction to this document highlights the complex definitions shaping social and cultural views of disability.

The medical model remains a dominant influence in North American culture, highlighting the role of the cognitive authority of the medical profession. As experts on the body, medical professionals continue to link disability to the body. Wendell outlines the downfall of the cognitive authority; highlighting the experiences of alienation, social abandonment and epistemic invalidation in the lives of individuals with physical disabilities.

Offering an alternative definition of disability, the social model highlights that disability is socially created through social values and practices. Using language, the social model acknowledges that disability is no longer an individual experience linked to the body. Disability is created through social structures that exclude individuals with impairments from certain social activities (Oliver, 1996). Drawing individuals with disabilities together as a social minority, the downfall of the social model is the emerging conflicts of interest among this minority group.

While both the medical and social models present strong arguments supporting their definition of disability, the lived body model is the only model that allows individuals with disabilities a voice in shaping the definition. The lived body model defines disability as the way that an individual interprets her experiences in the world as

she engages in activities in the physical and social world (Hughes & Patterson, 1997).

Unlike the other theoretical models of disability, the lived body model notes that the role of the body is key in shaping the meaning of all experiences, unique to each person.

Accordingly, disability is influenced by context and offers a powerful tool to examine the experiences and meaning of individuals with physical disabilities in physical activity.

The body itself is dynamic, evolving over time and through activities and interactions within different physical and social environments. Taking a phenomenological approach combined with the definition of disability offered by the lived body model facilitated the revelation of the dynamic relationship between the body and the environment. Research conducted with a focus on understanding the experience of disability or illness phenomenology illustrates the disruption of space which is an essential element of the experience of physical disability (Toombs, 1995).

Participants in this study occupied one of three distinct roles that of athlete, significant other (parents, spouse, friend), or instructor. The stories and images produced through interactions with participants able to provide information from diverse perspectives combined to create a vivid picture of the lived experience of movement in the aquatic environment. Narratives gathered through diverse methods share insider's perspective produced through diverse forms of data (written, verbal and visual). These diverse forms of data assisted to capture descriptions of the experiences of participants.

Interviews and lived experience descriptions provided verbal accounts of the experiences of those involved in adapted swim and scuba programs. Both forms of data collection provide the advantage in allowing the opportunity to engage in a dialogue with the informants, using probes to elicit additional details. The artifacts provided a visual

representation (or an additional auditory account in the case of one participant) which provided participants the opportunity to share information that they may not have been able to describe accurately in verbal/auditory forms of data collection.

Combining multiple perspectives and multiple methods revealed the eidetic features of the meaning of both forms of aquatic activities helping to build a detailed understanding of the embodied experience of swimming/scuba among individuals with physical disabilities. Conducting research using this approach allows the body to return to a place of authority in shaping our understanding of either form of aquatic activity, guiding future programs (Connolly, 1997).

Analysis of life-world existentials indicated that space (the aquatic environment) represented the dominant life-world existential in this study. Participants emphasized the contrast between their experiences in land-based physical activity and physical activity in the aquatic environment. This emphasis on space arose frequently in the interview and lived experience transcripts to describe the diversity of the aquatic environment.

Divers emphasized the diversity of the open water environment, focusing on the difference between a dive in the Caribbean and a dive in Canada, depth and the sensory experiences associated with a dive (visibility, ease of movement, water temperature). Beyond the diversity of the open water itself, participants emphasized the contrast between a dive in the open water and a dive in a pool.

While the divers emphasized the diversity of the locations of a dive as an aspect of the meaning of their experiences in the aquatic environment, swimmers emphasized the diversity of programs offered in the aquatic environment. Many swimmers took lessons before they joined the team and emphasized the contrast in their physical exertion

once they joined the swim team. Swimming as part of a team provided them the opportunity to improve their physical fitness and stroke technique.

Swimmers also emphasized the difference between swimming in a practice and swimming at a meet. Practices provide them the opportunity to socialize with team mates as they worked to improve their technique. Swim meets are an environment where swimmers focused on their own performance and goals, tuning out all other aspects of the environment.

In addition to an analysis by life-world existentials, a secondary form of analysis identified the keywords that appeared in the interview and lived experience description transcripts. To understand the significance of each keyword, the Etymological roots were traced illustrating the origin and evolution. One final form of analysis matched the visual Artifacts created by participants with relevant keywords.

Keywords from the lived-experience and interview transcripts were used along with the information yielded by the four life-world existentials to provide insight into the ways that individuals with physical disabilities describe the felt sense of their bodies while in the aquatic environment. Participants with physical disabilities described the felt sense of their bodies in the following ways: control, ease of movement, equality, accomplishment and dive/swim culture.

Control represents an important aspect of the ways participants described the felt sense of their bodies while in the aquatic environment. The laws of physics do not discriminate and while in the water all bodies are subject to the same forces of buoyancy, drag. This fact is echoed by many of the participants who emphasized that it's sink or swim for anyone who enters the water.

Beyond the unique characteristics of the aquatic environment, individuals with physical disabilities experience a sense of empowerment through the opportunity to choose the ways that their bodies move through the water. Participants experience heightened flexibility in the possibilities for movement and are able to choose a different/unique solution to achieve their goal. For the swimmers it may require adjustment to traditional stroke technique as Smiley does not kick when swimming backstroke to avoid swimming in circles. For the divers such as chair it may require additional weights to areas of their bodies that are atrophied to assist in achieving neutral buoyancy.

Aquatic environments naturally accommodate individuals with diverse levels of skill allowing participants to determine how they want to move in order to accomplish their goal. Many participants (specifically the instructors) echoed this fact, emphasizing each participant moves through the water in a different way. Movement in the aquatic environment is determined through the degree of comfort.

Analysis of the keywords re-enforces the significance of comfort as an aspect of the felt experience of movement in the aquatic environment. Movement in the aquatic environment fosters a sense of comfort with their bodies among individuals with physical disabilities. One aspect of this comfort is the opportunity to experience a reprieve from the experience of docility they experience as they go about their everyday activities in the world. This experience of control allows individuals with physical disabilities the opportunity to experience autonomy.

Movement in the aquatic environment presents a nice contrast to experiences on land for individuals with physical disabilities. The architecture of the world is designed to

suit the needs of the majority of the population who negotiate the world using an up-right posture (Toombs, 1995). Unfortunately, this creates additional restrictions among individuals with physical disabilities who experience frustration and are constantly aware of their body's limitations as they negotiate the physical environment on land. Individuals with physical disabilities must always keep their body's abilities and limitations in mind as they go negotiate the environment (Toombs, 1992).

Participants like BB, Chair and Missy emphasized the ease of movement while in the water in contrast to movement in land-based forms of physical activity. The effortless nature of movement while in the water emerged as a keyword that emphasized the influence of the environment on the degree of physical exertion experienced by the body. In contrast to land-based forms of movement, individuals with physical disabilities benefit from the reduced influence of gravity in the aquatic environment. The ease of movement while in the water reinforces the notion that anyone (even a quadriplegic like BB) is capable of engaging in physical activity, regardless of her levels of physical fitness. Participants in either form of aquatic activity experience benefits (physiological as well as psychological) which carry over into land-based forms of movement.

While in the water, participants engage in movements without the constraint of a mobility aid (wheelchair, cane, crutch). Once they enter the water, individuals with physical disabilities are not subject to the control of their mobility aids, which opens up new possibilities for movement allowing them to change positions with ease. The aquatic environment provides individuals with physical disabilities the opportunity to engage in activity without focusing on the ways that they negotiate the physical environment. Removing the focus from their bodies presents individuals with disabilities the

opportunity to interact with other participants where the visibility of their disability (through the use of a mobility aid) is not obvious. This provides participants with a sense of freedom from the gaze of others as they engage in physical activity.

As mentioned in the review of literature, the relationship that individuals develop with their bodies is influenced by physiology, the possibilities for movement as well as through social interaction. While in a social environment, such as a community-based recreation centre individuals view their bodies through the “gaze” of others. This “gaze” provides information about “what others see in me” and fuels objectification of the body and an immediate awareness of the body’s alien presence (Leder, 1990).

Individuals with physical disabilities are aware of this “gaze” as they participate in land-based physical activity. Mobility aids and physical appearance are both visible signs of physical difference. Unless other participants witness an individual with a physical disability using their mobility aid to enter the aquatic environment, individuals with physical disabilities experience a sense of relief from this “gaze”.

Beyond the gaze of others, individuals with physical disabilities are also subject to their own gaze. As they engage in any form of activity, they must constantly examine their body’s abilities/limitations in relation to their current environment and desired outcome (Toombs, 1992). For individuals who use mobility aids, the physical limitations of their bodies are at the center of attention as they engage in land-based forms of physical activity. Activities located in the aquatic environment facilitate the opportunity for the body to recede into the background of their gaze.

Participants emphasized the influence of the swim/dive culture on their experiences while in the aquatic environment. Being involved on a swim team, or in

scuba allowed them to interact with other participants through a shared interest. The swim culture was isolated to activities associated with the team (swim practices, meets and social events). A unique aspect of the team culture among participants in this study was the opportunity to participate on a team with their able-bodied sibling.

In contrast to the specific locations tied to the swim culture, the dive culture was dispersed across many forms of space (dive shops, dive organizations, face book groups). The scope of safety presents one major aspect of this contrast between swimming and scuba. While swimmers can enter the water and train on their own, diving requires partner/dive buddy. Among the divers interviewed spouses, children and former dive instructors may act as dive buddy.

Focusing on a shared interest reduced the body's alien presence among participants with physical disabilities. Participants shifted their focus from feelings of "otherness" to their shared passion for either form of activity allowed. Individuals with physical disabilities were regarded as an equal in both cultures, in contrast to their experiences in other social settings.

Individuals with physical disabilities are placed in a position of social minority in land-based forms of physical activity in comparison to their experiences of equality among other members of the swim/dive cultures. To compensate for this sense of social inferiority, participants emphasized their pride in their sense of accomplishment (ornamental attainments) due to participation in adapted aquatic programming while in other social settings (schools, bars, work). Participants in this study emphasized the mastery of a set of skills in swimming or scuba. Comparing their accomplishments like earning their diving license, participating in a swim meet to members of the able-bodied

population. Among the able-bodied population, some individuals will never master skills in the aquatic environment due to fear of water.

Among individuals with acquired disabilities, participation in either form of program (but more specifically scuba) serves as a means to combat the disciplinary practices that dictate and fuel false belief that persons with disabilities are restricted to play the “sick role” and subject to experiences deemed appropriate for individuals who occupy this role.

Using the stories and descriptions participants shared through the interviews and lived experience descriptions shapes the answer to the secondary research question. The second research question guiding this study sought to understand the ways that participants construct meaning out of their experiences in the aquatic environment. Using the keywords, images and transcripts indicated that participants constructed meaning out of their experiences in either form of aquatic activity by comparing their experiences in the aquatic environment to their experiences in land-based forms of activity. This difference between land-based movement and movement in the aquatic environment is best understood by examining the concept of forgetfulness (of the lived body), motility and home-likeness.

The lived body emerged as a concept to illustrate the role of the body in their experiences in the water compared to their experiences in land-based activities. As is outlined in the review of literature, the lived body is the body present in everyday experiences and activities (Leder, 1992). Functioning in a holistic manner, the lived body shapes the ways that an individual understands the world (Gallagher, 1986). This

understanding unifies the physiological and psychological aspects of the self, which is not isolated to one part or sensory organ of the body.

In its optimal state (the state of the able-bodied), the lived body facilitates all interaction in the world at a level of understanding below conscious awareness. When the lived body is not at the center of attention, the body is in the background of our awareness in an ecstatic state (Leder, 1990). Among the able-bodied the lived body eludes their everyday activities in the world.

When the body experiences pain, illness or disability the lived body appears at the center of our attention. Until we identify the source of this pain or discomfort the body remains present as we continue to interact with the physical environment (Leder, 1990). While the lived body's presence is only temporary among the majority of the population, its presence is constant among individuals with physical disabilities (Toombs, 1992)*. This is in part due to the architecture and design of the world that is built to suit the needs of the majority. The design of the world is therefore built to suit the needs of individuals who interact in the world using an up-right posture.

Individuals with physical disabilities confront the lived body on a daily basis as they size up the environment and develop a plan of action. Unfortunately, the possibilities for movement on land are often limited due to the design of the world. For individuals with physical disabilities the design of the world and its restrictions on movement are inescapable. Not only is the lived body experienced as inescapable, it is always present at the center of their attention as they go about their everyday activities (Toombs, 1992).

Activities in the aquatic environment are appealing as they provide individuals with physical disabilities with the opportunity to experience movement in an environment

that allows the lived body to recede from conscious awareness. Once in the water, individuals with physical disabilities are empowered to choose the ways they move about in the water. Unique characteristics of the water such as buoyancy, fluctuating temperature and depth assist in facilitating diverse settings. Movement experiences in the aquatic environment allow individuals with physical disabilities the freedom to forget about their body's presence due to its limitations.

Forgetfulness is a significant term in relation to the meaning of movement in the aquatic environment for individuals with physical disabilities. The meaning associated with the word forget implies the term means to loose one's hold or grasp on the mind (Barnhart, 1988). The keyword analysis table does not contain the term forget. The term does hold significance when comparing the experience of the lived body among members of the population with and without disabilities. One keyword that appeared frequently in the transcripts is freedom. In relation to understanding the lived body, forgetfulness can be substituted for freedom as movement in the aquatic environment allows individuals with physical disabilities the freedom to experience their own bodies in its ecstatic state.

Beyond the opportunity to forget the lived body, individuals with physical disabilities derive meaning out of their experiences in the water through the impact of the aquatic environment on their motility. As defined in the review of literature, motility represents the body's ability and possibilities for movement in the world (Leder, 1990). Motility shapes the experience of specific activities in the world opening new possibilities for interaction with the world. These new possibilities for movement are amplified by using tools and technology (Leder, 1990).

Individuals with physical disabilities experience the world through compromised motility due to their body's limited physical abilities and due to limited possibilities for movement based within the physical environment. Among individuals with physical disabilities, the body causes the possibilities for action (motility) in the world to be reduced (Toombs, 1992). As mentioned in the review of literature there are two types of space influencing our motility. Physical space represents the context for movement while functional space is the layout of the environment available to perform their actions (Toombs, 1995). While in the water individuals with physical disabilities are in a position of control making it easier to change positions, modify the size and speed of their movement with immediate kinaesthetic feedback.

All transcripts reveal participants indicated that the aquatic environment opened up additional possibilities for movement in the world. While in the water, individuals with physical disabilities experience additional range in their motility. The diversity of the aquatic environment as highlighted by the divers and swimmers indicates that space holds a significant influence in shaping the meaning of movement and physical activity among individuals with physical disabilities. Participants derived meaning from their experiences in the aquatic environment when comparing their motility in the physical space in land-based physical activity settings to the physical space in aquatic activities. Blue mermaid's interview transcripts provide an example of the difference between her experience in land-based forms of activity and activities in the aquatic environment. As echoed in many transcripts, land-based forms of physical activity often resulted in frustration due to limited mobility and independence. Their preferences to opt to participate in aquatic activities are due to a greater degree of comfort while in the water.

As mentioned earlier in the discussion, one aspect of this comfort is the ability to engage in a form of physical activity without their mobility aids. Movement in the environment without the presence of a mobility aid opens up additional possibilities for movement. Beyond the impact of the absence of a mobility aid on motility, the unique characteristics of the water such as buoyancy present individuals with physical disabilities with additional possibilities for movement. Participants revealed the aquatic environment accommodates movement among individuals with diverse levels of physical fitness, range of motion and motor skill. The unique characteristics associated with the aquatic environment provide a positive experience in physical activity that can augment/replace traditional therapeutic settings.

Motility is often associated with the concept of anchoring. An anchor is a heavy device that is cast over a boat and sinks to the bottom of the body of water to hold the boat in a particular place (Merriam-Webster's Collegiate Dictionary, 2007). Interpreting the significance of this term in relation to the body, anchoring represents the body's position in the world. Typically, the body's capacity for locomotion opens up space allowing an individual freedom to move about in the world. The experience of limited mobility/locomotion among individuals with physical disabilities causes the body to be anchored "here" in the environment. Anchoring the body in the environment causes a heightened sense of distance between the body and objects in functional space. Anchoring serves as a reflection of the subjective experience of lived space (Toombs, 1995).

While an anchor is traditionally used to hold an object in place in the aquatic environment, participants reveal a significance of the term in relation to their experiences

on land. In land-based forms of physical activity mobility aids cause individuals with physical disabilities to be anchored in space. Anchoring is not only attributed to the physical presence of the mobility aid. The architecture (specifically the accessibility) of the functional space itself limits the possibilities for movement.

Language such as buoyancy, freedom and exploration that appeared frequently in the transcripts indicates that the experiences of the participants in this study argue against the traditional definition of an anchor in the aquatic environment. Rather than experiencing the aquatic environment anchored to a specific location, participants are in a position of control. They can change positions, adjust their level of physical exertion as they move in an environment that is designed to suit the needs of multiple users and programs. Unique characteristics such as buoyancy allow participants to engage movement many describe as effortless.

The final concept used to understand the meaning of physical activity in aquatic environments among individuals with physical disabilities is home-likeness. Home-likeness is a term that can be used to describe everyday experiences when the body is experiencing the world through an ecstatic state (Leder, 1990). In this state, the body is at home in the world working in co-operation towards a specific goal.

Anchoring and limited motility in the world are a common experience among individuals with physical disabilities as they go about their everyday activities. Each concept relates to the body's un-homelike presence in the world. The body of an individual with a physical disability exists in an un-homelike relationship with the world due to a break-down in the body's abilities in relation to the self (Standahl, 2009). Individuals with physical disabilities experience the world through an un-homelike state.

Awareness of this un-homelikeness in the world is made possible through the limited possibilities for action in a world designed to meet the needs of the able-bodied majority.

Participation in land-based forms of activity emphasizes the body and its un-homelike presence in the world. Mobility aids remain visible among participants, individuals must determine the appropriate modifications keeping in mind their body's limitations (Toombs, 1992)*.

In contrast to the body's un-homelike presence in land-based forms of physical activity participants emphasized the appeal of aquatic activities through the home-like experiences of their bodies. The language provided in the interview and lived experience description transcripts such as comfort, control, freedom emphasize the impact of both forms of aquatic activities for individuals with physical disabilities.

Implications

The results of this study support the notion that the aquatic environment is an appealing venue for physical activity among individuals with diverse types of physical disabilities. Participants in both the adapted swim and scuba programs emphasized the ease of movement while in the aquatic environment as they engaged in physical activity compared to land-based activities. Motility among individuals with physical disabilities is affected through the increased possibilities for movement in the water. Among individuals with acquired disabilities, participation in the aquatic environment assisted in the process of restoring a sense of comfort with their own bodies and opening up new possibilities for movement.

Participants noted an improvement in their physical fitness following regular participation in either form of aquatic activity. These changes facilitated positive

experiences in other forms of physical activity (soccer, basketball) beyond the aquatic environment in physical education and exercise classes.

Analysis of the stories and Artifacts shared by informants indicates that individuals with physical disabilities seemed to thrive through their experiences in integrated aquatics programming. Both programs in this study serve as examples of programs where integration is successful. While in the water for a swim or a dive, the visibility of their disability is minimized as they don't require mobility aids to move about in the water. Unless others in the water for a swim or dive see an individual with a mobility aid getting into the water they are unable to note this difference until they all exit the water.

Part of the dive and swim cultures is to spend a great deal of time socializing before or after their time in the water. This interaction allows individuals with and without disabilities to connect through a common interest, challenging social stigma about disabilities.

The results of this study indicate the importance of context in the experience and meaning of physical activity among individuals with physical disabilities. Some environments such as the aquatic environment are more forgiving than others. The flexibility of the aquatic environment compensates for participants with diverse physical abilities and limitations allowing for multiple solutions to arrive at the same outcome.

Participants' response to the design of the artifact description protocol highlights the power of using an expressive medium. Participants in this study valued the opportunity to express themselves using alternative media (visual and auditory artifacts).

One final aspect of this study is the opportunity to highlight the importance of training instructors and individuals with physical disabilities to understand the role of the lived body in their experiences. Specifically this training should illustrate the difference between the lived body and the object body. Armed with this knowledge instructors and participants are more likely to understand the value of listening to what the body is saying.

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APPENDIX A

LETTERS OF INVITATION

Letter of Invitation: Organization

Title of Study: Experiences and meaning of the aquatic environment for individuals with physical disabilities

Principal Investigator: Katie Cocchio, M.A. Candidate, Department of Physical Education and Kinesiology, Brock University

[Insert name of Aquatic Program of Interest],

As an individual with an acquired disability, swimming and the aquatic environment remain important components of my life. The pool is a friendly place for me to maintain my health through recreation. Working as a swim coach for other athletes with disabilities, I witnessed the impact swimming and the aquatic environment has on their lives. Based on my own personal experiences as a swimmer and a coach, I am interested in working with your organization to deepen my understanding of the experiences and meaning of the aquatic environment for youth with physical disabilities.

The purpose of this project is develop a vivid description of the experiences of youth with physical disabilities who participate in (insert appropriate aquatic sport program) as a form of physical activity and leisure. Through the research process I want to understand the contribution (insert appropriate aquatic sport) makes on how they relate to their bodies and the impact (insert appropriate aquatic sport) has on their identities. I am interested in working with your organization and the (insert appropriate aquatic sports program) as I gather information on the role of the aquatic environment in the lives of youth with physical disabilities.

In order to complete my research, I need to conduct interviews with coaches, parents and swimmers. The time commitment for participation in this project for each individual participant will be three hours. The initial interview will require two hours and the follow up interview will require one hour. Both the initial interview and the follow up interview will be held on weekends in the fall (November to December) and winter (January to February). To maintain the confidentiality of those involved in this program, they will each choose a pseudonym at the beginning of the first interview.

In addition to interviews each participant will complete two assignments, an audio recording relating a story about their experience in preparing to participate in the (insert appropriate aquatic program) as well as submit an Artifact (drawing, or photo) that signifies the meaning of their experiences in (insert appropriate aquatic sport).

Other than the co-operation of all those involved in the (insert appropriate aquatic sport), I will require access to two small meeting rooms. These rooms will be used for three hours during the morning and three hours during the afternoon on weekends from October to December as I conduct the interviews.

This research should benefit your organization as well as the participants in your (insert appropriate aquatic sport) program by providing your athletes, coaches and all those involved in these programs with the opportunity to reflect upon the significance (insert appropriate aquatic sport) has on the lives of youth with physical disabilities. Developing an understanding of the meaning of (insert appropriate aquatic sport) will assist your organization by providing you with a narrative account of (insert appropriate aquatic sport) in promoting participation and support for (insert aquatic sport).

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any questions or concerns, please feel free to contact myself, the principal investigator through e-mail or telephone.

Thank you
Katie Cocchio
M.A. Candidate, Brock University
(905) 397-8125
kc07yw@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [file # 08-004]

Letter of Invitation: Instructor

Title of Study: Experiences and meaning of the aquatic environment for Individuals with physical disabilities

Principal Investigator: Katie Cocchio, M.A. Candidate, Department of Physical Education and Kinesiology, Brock University

As an individual with an acquired disability swimming and the aquatic environment remain important components of my life. The pool is a friendly place for me to maintain my health through recreation. Working as a swim coach for other athletes with disabilities, I witnessed the impact swimming and the aquatic environment has on their lives. Based on my own personal experiences as a swimmer and a coach, I am interested in working with you to develop an understanding of the experiences and meaning of the aquatic environment for individuals with physical disabilities.

The purpose of this project is explore the experiences of individuals with physical disabilities who participate in scuba diving as a form of physical activity and leisure. Through the research process I want to understand the contribution diving makes to the ways that individuals with physical disabilities relate to their bodies and the impact diving has on their identities. I am interested in working with you and your organization and the divers as I gather information on the role of the aquatic environment in the lives of individuals with physical disabilities.

To complete my research, I need to conduct interviews with you, the instructor, to gain an understanding of your perspective on the impact that participation in diving has on the lives of individuals with physical disabilities. The time commitment for participation in this project will be two hours. The initial interview will require one hour and the follow up interview will require one hour. Both the initial interview and the follow up interview will be held in the winter of 2009.

In addition to interviews, you will be asked to complete two assignments: an audio recording sharing a story about what your athletes do as they prepare to begin a practice as well as submit an Artifact (drawing, or photo) that signifies the meaning of their experiences in diving.

This research should benefit your experience as an instructor by providing you with insight into the meaning of physical activity in the aquatic environment for youth with physical disabilities. In addition to the benefits to you as the instructor, your athletes will benefit as this is an opportunity that provides them the opportunity to reflect upon the significance diving has on their lives.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any questions or concerns, please feel free to contact me.

Thank you

Katie Cocchio

Katie Cocchio
M.A. Candidate, Brock University
(905) 397-8125
Kc07yw@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [file # 08-004]

Letter of Invitation: Parents/Significant others

Title of Study: Experiences and meaning of the aquatic environment for Individuals with physical disabilities

Principal Investigator: Katie Cocchio, M.A. Candidate, Department of Physical Education and Kinesiology, Brock University

As an individual with an acquired disability swimming and the aquatic environment remain important components of my life. The pool provides a friendly place for me to maintain my health through recreation. Working as a swim coach for other athletes with disabilities, I witnessed the impact swimming and the aquatic environment has on their lives. Based on my own personal experiences as a swimmer and a coach, I am interested in working with your organization to develop an understanding of the experiences and meaning of the aquatic environment for youth with physical disabilities.

The purpose of this project is to explore the experiences of youth with physical disabilities who participate in (insert appropriate aquatic sport program) as a form of physical activity and leisure. Through the research process I want to understand the contribution (insert appropriate aquatic sport) makes on how they relate to their bodies and the impact (insert appropriate aquatic sport) has on their identities. I am interested in working with you and your child as I gather information on the role of the aquatic environment in the lives of youth with physical disabilities.

In order to complete my research, I need to conduct interviews with you, the parent of an athlete participating in (insert appropriate aquatic sport) to gain an understanding of your perspective on the impact that participation in (insert appropriate program name) has on the lives of youth with physical disabilities. The time commitment for participation in this project will be three hours. The initial interview will require two hours and the follow up interview will require one hour. Both the initial interview and the follow up interview will be held on weekends in the fall (November to December) and winter (January to February).

In addition to interviews you will be asked to complete two assignments: an audio recording relating a story about what your child does as they prepare to begin a practice, as well as submit an Artifact (drawing, or photo) that signifies the meaning of their experiences in (insert appropriate aquatic sport).

Participation in this project will be of benefit to you as the interviews will allow you to reflect on the significance that (insert appropriate aquatic sport) has in your child's life. Your child will experience similar benefits as the interview and two assignments present them with the opportunity to reflect upon the significance (insert appropriate aquatic sport) has on their lives. Developing an understanding of the impact (insert appropriate aquatic sport) has on how youth with disabilities see and feel about themselves will assist in providing recreational organizations with a narrative of the importance of (insert appropriate aquatic sport) in the lives of youth with physical disabilities.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any questions or concerns, please feel free to contact me.

Thank you

Katie Cocchio

M.A. Candidate, Brock University

(905) 397-8125

kc07yw@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [file # 08-004]

Letter of Invitation: Athletes

Title of Study: Experiences and meaning of the aquatic environment for Individuals with physical disabilities

Principal Investigator: Katie Cocchio, M.A. Candidate, Department of Physical Education and Kinesiology, Brock University

As an individual with an acquired disability swimming and the aquatic environment remain important components of my life. The pool provides a friendly place for me to maintain my health through recreation. Working as a swim coach for other athletes with disabilities, I witnessed the impact swimming and the aquatic environment can have on their lives. Based on my own personal experiences as a swimmer and a coach, I am interested in working with your organization to develop an understanding of the experiences and meaning of the aquatic environment for youth with physical disabilities.

The purpose of this research project is to explore your experiences in (insert appropriate aquatic sport) as a form of physical activity and leisure. Through the research process, I want to understand the contribution (insert appropriate aquatic sport) makes on how you relate to your body. I am also interested in examining the influence of (insert appropriate aquatic sport) on your identity. I am interested in working with you as I gather information on the role of the aquatic environment in the lives of youth with physical disabilities.

In order to complete my research, I need to conduct interviews with you, the athlete, participating in (insert appropriate aquatic sport) to gain an understanding of your perspective on the impact that participation in (insert appropriate program name) has on the lives of youth with physical disabilities. The time commitment for participation in this project will be three hours. The initial interview will require two hours and the follow up interview will require one hour. Both the initial interview and the follow up interview will be held on weekends in the fall (November to December) and winter (January to February).

In addition to interviews you will be asked to complete two assignments: an audio recording relating a story about the process you go through to prepare for a practice, as well as an submit an Artifact (drawing, or photo) that signifies the meaning of your experiences with (insert appropriate aquatic sport).

This research should benefit your experience in the water by providing you with the opportunity to reflect upon the significance of (insert appropriate aquatic sport) in your life. Developing an understanding of the impact of (insert appropriate aquatic sport) on how youth with disabilities see and feel about themselves will assist recreational organizations offering aquatic programming by providing them with a narrative of the importance of (insert appropriate aquatic sport) in the lives of youth with physical disabilities.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca)

If you have any questions or concerns, please feel free to contact me.

Thank you

Katie Cocchio

M.A. Candidate, Brock University

(905) 397-8125

Kc07yw@brocku.ca

This study has been reviewed and received ethics clearance through Brock University's Research Ethics Board [file # 08-004]

APPENDIX B

INTERVIEW GUIDES

Interview Guide Swimmer:

1. Tell me a little about yourself (age, grade in school, favorite things to do, your disability)
2. Tell me a little about your family (# of people in your family, who brings you to swim)
3. Describe how your disability influences your experiences in physical activity (limitations in activity)
4. When did you start this program
5. What made you interested in swimming
6. Describe some of the first skills and activities you learned when you first started swimming.
7. What are some of your goals (as a swimmer, with this program, for this season)?
8. Describe a typical season in your program.
9. Describe the reasons you joined this program
10. How does your family support you as a swimmer? (What is your family's role in your experience as a swimmer)
11. Describe the difference between your experiences in physical activity on land vs. physical activity in the water?
12. Describe the first time you got into the water to swim (on your own or with the team)
13. Describe how your body feels when you move in the water (on your stomach doing freestyle, when you swim on your back doing backstroke)
14. Describe the difference between swimming on your own (for fun in the summer) and swimming in a practice
15. Tell me a little about your interactions with other the people from the time you enter the facility for practice to the time you get into the water for practice
16. Describe what you see and hear when you first step onto the deck for a practice

17. Walk me through your routine in a typical practice
18. Tell me about some of the equipment you use when you swim
19. What are some of the highlights of the season
20. What are some of the highlights from your experiences as a swimmer?
21. If I were to come to watch a practice, what would I expect to see and hear? (What would be going on during a practice?)
22. What activities feel effortless/ easy to do in the water?
23. What activities feel challenging/ difficulty to do in the water?
24. Describe how you feel at the end of a practice
25. What is the difference between swimming in practice and swimming at a meet?
26. Describe how you feel before a race?
27. How do you feel after a race?
28. How does your coach influences your experience in the water during practice
29. Describe the difference between a good practice and a bad practice
30. Tell me a story about an experience that makes you feel excited to keep swimming
31. Describe an event in practice that made you feel frustrated with swimming
32. In your opinion, why are adapted swim programs necessary for individuals with physical disabilities?
33. What is the impact swimming has on your life?
34. How does swimming fit into your future?
35. Since your first practice, what changes have been made to the program?
36. Describe the relationships you've developed through this program

Interview Guide Parent:

1. Tell me a little about yourself (age, grade in school, favorite things to do, your disability)
2. Tell me a little about your family (# of people in your family, who brings you to swim)
3. Describe how your child's disability influences their experiences in physical activity
4. When did your child start this program
5. Describe the reasons your child joined this program / What made your child interested in swimming?
6. What are some of your child's goals (as a swimmer, with this program, for this season)?
7. Describe some of the first skills and activities your child learned when they started swimming
8. Describe a typical season in your program.
9. How do you support your child's interest in swimming? (What is your family's role in your experience as a swimmer)
10. Describe the difference between your child's experiences in physical activity on land vs. physical activity in the water?
11. Describe the first time your child got into the water to swim (on your own or with the team)
12. How does physical activity in water influence the ways your child can move and use their body.
13. Describe the difference between swimming on their own (for fun in the summer) and swimming in a practice
14. Tell me a little about your child's interactions with other the people from the time that they enter the facility for practice to the time that they get into the water for practice
15. Describe what you see and hear when you first step onto the deck for a practice
16. Walk me through your child's routine in a typical practice

17. Tell me about some of the equipment your child uses when they swim
18. What are some of the highlights of the season
19. What are some of the highlights from your child's experiences as a swimmer?
20. If I were to come to watch a practice, what would I expect to see and hear? (What would be going on during a practice?)
21. What activities seem effortless/ easy for your child to do in the water?
22. What are some activities that your child finds challenging/ difficult to do in the water?
23. Describe how your child feels at the end of a practice
24. What is the difference between swimming in practice and swimming at a meet?
25. Describe how your child feels before a race?
26. How does your child feel after a race?
27. How does the coach influences your child's experience in the water during practice
28. Tell me a story about an experience that made your child feel excited to keep swimming
29. Describe an event in practice that made your child feel frustrated with swimming
30. In your opinion, why are adapted swim programs necessary for individuals with physical disabilities?
31. What is the impact swimming has on your child's life?
32. How does swimming fit into your child's future lifestyle?
33. Since your child's first practice, what changes (if any) have been made to the program?
34. Describe the relationships your child has developed through this program

Coach Questions Interviews:

1. Tell me a little about yourself (age, favourite things to do, job title, length of time worked as a coach)
2. Tell me how you became involved as a coach in this program.
3. What form of training did you need before you started this program?
4. What experience did you have that made you interested in coaching swimmers with disabilities?
5. What are some of your goals for this program?
6. Describe a typical athlete in your program.
7. Describe some of the reasons individuals with physical disabilities join your program.
8. Describe some of your athlete's goals
9. Walk me through a typical season
10. How familiar were you with disabled sports before starting this program?
11. Describe some of the adapted equipment your athletes use to participate
12. Describe some of the first skills you teach a swimmer when they start with your program
13. Describe how practices have evolved since this program began
14. Describe your athletes reactions the first time they get into the water for a practice (their first practice with the team/ first practice of the season)
15. How does physical activity in water influence the ways your athletes can move and use their bodies.
16. Walk me through what an athlete does during a practice
17. What are some adaptations you made to accommodate your athletes
18. What are some highlights of the season your athletes have the opportunity to experience with your program?
19. Describe your athletes routine from the moment they step on deck to the time they get into the water
20. Describe your interaction with your athletes from the moment they arrive at the facility to the moment they enter the water

21. Describe what you see and hear when you first step onto the deck for a practice
22. What activities seem effortless/ easy for your athletes to do in the water?
23. What are some activities that your swimmers finds challenging/ difficult to do in the water?
24. Describe how your swimmers feel at the end of a practice
25. What is the difference between swimming in practice and swimming at a meet?
26. Describe how your athletes feel before a race?
27. How do your swimmers feel after a race?
28. Describe how you influence your swimmers experiences
29. Describe your views of physical activity on land vs. in the water for your athletes
30. What do you note as the impact of participation in this program on your athletes lives?
31. In your opinion, what is the need for such programs?
32. How does swimming fit into your athletes future lifestyle?
33. Describe the relationship you've developed with your athletes
34. Tell me about skills your athletes find challenging
35. Tell me about the skills your athletes enjoy
36. Tell me a story about a practice where you felt frustrated with your athletes
37. Tell me a story where you felt proud of your athletes
38. Describe how you provide a welcoming and supportive environment for your athletes
39. Since the first practice you planned, what changes, if any have you made?

APPENDIX C

INFORMED CONSENT

Informed Consent Form Coach

Date: November 5, 2008
 Project Title: Experiences and meaning of the aquatic environment for youth with physical disabilities

Principal Investigator:
Katie Cocchio, M.A. Candidate
 Department of Physical Education and Kinesiology
 Brock University
 (905) 397-8125, kc07yw@brocku.ca

Faculty Supervisor (if applicable):
 Dr. Maureen Connolly
 Department of Physical Education and
 Kinesiology
 Brock University
 (905) 688-5550 Ext. 4707,
 mconnolly@brocku.ca

INVITATION

You are invited to participate in a study involving in-depth interviews on your experiences in the aquatic environment as a dive instructor. The purpose of this is to develop an understanding of your athlete's experiences and the derived meanings associated with adapted scuba in order to enhance social, cultural and political understandings of the impact of aquatic environments in the lives of youth with physical disabilities.

WHAT'S INVOLVED

As a participant, you will be asked to participate in an hour long in-depth interview based on your athlete's experiences as an instructor. Following the interview you will be asked to provide an audio recording of a story about your athlete's experience in preparing for a dive. In addition to the interview and audio-recording you will be asked to create a drawing or find an image that symbolizes the meaning of your athlete's experiences in the aquatic environment and submit it to primary research using envelope provided. After the interview has been transcribed and the central themes and artifact have been interpreted, a second meeting will be scheduled at a later date to confirm my interpretation of the information you share during the initial interview.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include the possibility that you will gain a better understanding of the impact diving has in the lives of your athletes. This study will provide insight into the importance that the aquatic environment has as a mode of physical activity for individuals with physical disabilities. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

The information you provide will be kept confidential. Your name will not appear in any report or the thesis resulting from this study; however, at the beginning of the initial interview you will decide on a pseudonym will be attached to any quotations that may be used. During the interview session I will be using a voice recorder as the primary mode to gather the descriptions and information you provide. Shortly after the interview has been completed, I will transcribe the audio recording to computer and in our second face to face meeting will ask you to confirm the accuracy of a copy of the transcript. This gives you the opportunity to confirm the accuracy of our conversation and to add or clarify any information presented. Data collected during this study will be stored in a locked filing cabinet as well as on my computers hard drive. Data will be kept for 5 years after the study is completed. After the 5 years the hard copies of the transcripts will be shredded and the copies of the transcript on the computer hard drive will be erased. Access to this data will be restricted to myself and my thesis supervisor.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. During the interviews and data collection, you may decline to answer any questions or participate in any component of the study. In addition, at any time before March 31, 2009, if you wish to cease your involvement and association with this study, you are able to do so at any time before March 31, 2009 and may do so without any issues or concerns by notifying the researcher through e-mail or by telephone.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available by April 2009 by contacting me the primary researcher by telephone or e-mail.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact myself, the principal Investigator, or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Informed Consent Form Parent

Date: November 5, 2008
 Project Title: Experiences and meaning of the aquatic environment for youth with physical disabilities

Principal Investigator:
Katie Cocchio, M.A. Candidate
 Department of Physical Education and Kinesiology
 Brock University
 (905) 397-8125, kc07yw@brocku.ca

Faculty Supervisor (if applicable):
 Dr. Maureen Connolly
 Department of Physical Education
 and Kinesiology
 Brock University
 (905) 688-5550 Ext. 4707,
mconnolly@brocku.ca

INVITATION

You are invited to participate in a study involving in-depth interviews on your child's experiences in the aquatic environment as an (insert appropriate aquatic sport). The purpose of this is to develop an understanding of your child's experiences and the derived meanings associated with (insert appropriate aquatic sport) in order to enhance social, cultural and political understandings of the impact of aquatic environments in the lives of youth with physical disabilities.

WHAT'S INVOLVED

As a participant, you will be asked to participate in an hour long in-depth interview based on your child's experiences as a (insert appropriate aquatic sport). Following the interview you will be asked to provide an audio recording of a story about your child's experience in preparing for a (insert appropriate aquatic sport) practice. In addition to the interview and audio-recording, you will be asked to create a drawing or find an image that symbolizes the meaning of your child's experience in the aquatic environment to be submitted to the primary researcher using envelope provided. After the interview has been transcribed and the central themes and artifact have been interpreted, a second hour long meeting will be scheduled at a later date to confirm the interpretations of the meaning of the aquatic environment in your child's life.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include the possibility that you will gain a better understanding of the impact (insert appropriate aquatic sport) has on how your child sees and thinks about him/herself. This study will provide insight into the importance that the aquatic environment has as a mode of physical activity for youth with physical disabilities. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

The information you provide will be kept confidential. Your name will not appear in any report, or the thesis resulting from this study; however, at the beginning of the initial interview you will decide on a pseudonym that will be attached to any quotations used. During the interview session I will be using a voice recorder as the primary mode to gather the descriptions and information you provide. Shortly after the interview has been completed, I will transcribe the audio recording to computer and in our second face to face meeting, I will ask you to confirm the accuracy of a copy of the transcript. This gives you the opportunity to confirm the accuracy of our conversation and to add or clarify any information presented. Data collected during this study will be stored in a locked filing cabinet as well as on my computer's hard drive. Data will be kept for 5 years after the study is completed. After the 5 years the hard copies of the transcripts will be shredded and the copies of the transcript on the computer hard drive will be erased. Access to this data will be restricted to myself and my thesis supervisor.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. During the interviews and data collection, you may decline to answer any questions or participate in any component of the study. In addition, at any time before December 31, 2008, if you wish to cease your involvement and association with this study, you are able to do so at any time before December 31, 2008 and may do so without any issues or concerns.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available by January 2009 by contacting the primary researcher by telephone or e-mail.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact the Principal Investigator or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Informed Consent Form Athlete Over 18

Date: November 5, 2008
 Project Title: Experiences and meaning of the aquatic environment for Individuals with physical disabilities

Principal Investigator:
Katie Cocchio, M.A. Candidate
 Department of Physical Education and Kinesiology
 Brock University
 (905) 397-8125, kc07yw@brocku.ca

Faculty Supervisor (if applicable):
 Dr. Maureen Connolly
 Department of Physical Education and Kinesiology
 Brock University
 (905) 688-5550 Ext. 4707,
 mconnolly@brocku.ca

INVITATION

You are invited to participate in a study involving in-depth interviews on your experiences in the aquatic environment as a diver. The purpose of this is to develop an understanding of your experiences and the derived meanings associated with diving in order to enhance social, cultural and political understandings of the impact of aquatic environments in the lives of individuals with physical disabilities.

WHAT'S INVOLVED

As a participant, you will be asked to participate in an hour long in-depth interview based on your experiences as a diver. Following the interview you will be asked to provide an audio recording of a story about your experience during a dive. In addition to the interview and audio-recording you will be asked to create a drawing or find an image that symbolizes the meaning of your experience in the aquatic environment and submit it to primary research using envelope provided. After the interview has been transcribed and the central themes and artifact have been interpreted, a second hour long meeting will be scheduled at a later date to confirm the interpretations of the meaning of the aquatic environment in your life.

POTENTIAL BENEFITS AND RISKS

Possible benefits of participation include the possibility that you will gain a better understanding of the impact diving has on how you see and think about yourself. This study will provide insight into the importance that the aquatic environment has as a mode of physical activity for individuals with physical disabilities. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

The information you provide will be kept confidential. Your name will not appear in any report or the thesis resulting from this study; however, at the beginning of the initial interview you will decide on a pseudonym will be attached to any quotations that may be used. During the interview session I will be using a voice recorder as the primary mode to gather the descriptions and information you provide. Shortly after the interview has been completed, I will transcribe the audio recording to computer and in our second face to face meeting will ask you to confirm the accuracy of a copy of the transcript. This gives you the opportunity to confirm the accuracy of our conversation and to add or clarify any information presented. Data collected during this study will be stored in a locked filing cabinet as well as on my computers hard drive. Data will be kept for 5 years after the study is completed. After the 5 years the hard copies of the transcripts will be shredded and the copies of the transcript on the computer hard drive will be erased. Access to this data will be restricted to myself and my thesis supervisor.

VOLUNTARY PARTICIPATION

Participation in this study is voluntary. During the interviews and data collection, you may decline to answer any questions or participate in any component of the study. In addition, at any time before April 1st, 2009, if you wish to cease your involvement and association with this study, you are able to do so at any time before April 1st, 2009 and may do so without any issues or concerns.

PUBLICATION OF RESULTS

Results of this study may be published in professional journals and presented at conferences. Feedback about this study will be available by May, 2009 by contacting me the primary researcher by telephone or e-mail.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact myself, the principal Investigator, or the Faculty Supervisor using the contact information provided above. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University. If you have any comments or concerns about your rights as a research participant, please contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your assistance in this project. Please keep a copy of this form for your records.

CONSENT FORM

I agree to participate in this study described above. I have made this decision based on the information I have read in the Information-Consent Letter. I have had the opportunity to receive any additional details I wanted about the study and understand that I may ask questions in the future. I understand that I may withdraw this consent at any time.

Name: _____

Signature: _____ Date: _____

Assent Form Athlete under 18

Date: November 5, 2008

Project Title: Experiences and meaning of the aquatic environment for youth with physical disabilities

Principal Investigator:

Katie Cocchio, M.A. Candidate

Department of Physical Education and Kinesiology

Brock University

(905) 397-8125, kc07yw@brocku.ca

Faculty Supervisor (if applicable):

Dr. Maureen Connolly

Department of Physical Education

and Kinesiology

Brock University

(905) 688-5550 Ext. 4707,

mconnolly@brocku.ca

INVITATION

Today we are here to talk about your experiences as a swimmer with (insert appropriate aquatic program). The information and stories you share today will help others understand the role of swimming in your life and in the life of other youth with physical disabilities. Your stories will be used along with stories other swimmers provide to create a complete picture of the impact of swimming in programs like (insert program name). The stories you and other swimmers share will be used to provide support for the benefits associated with swimming for other youth with physical disabilities. Before we begin talking, it is important that you know I will not be mentioning your name and your identity will not be attached to the stories you share. Together we will choose a nickname that will represent you and your stories. Only you and I will be aware of your real identity.

WHAT'S INVOLVED

If you agree to participate in this project you will be asked to participate in two face to face interviews. The first interview will be used to share your stories about your experiences as a (insert appropriate aquatic sport). The second interview will be held at a later date to verify the way I interpret the meaning of the stories you shared in the first interview about the role of (insert appropriate aquatic sport) in your life. Each interview will be on a weekend and last for one hour. If it makes you feel more comfortable to share your stories with me, you can have one of your parents sitting in the room while we conduct both interviews. In addition to the interviews I would like you to create a drawing or provide me with an image that symbolizes the meaning of your experiences in (insert appropriate aquatic sport). You can create this image on the day of the first interview, or you can mail it back to me using the envelope I will provide for you. I would also like you to create an audio recording telling me a story about what you do to prepare for a practice from the time you enter the facility to the time you enter the water. The interviews, the work of art you create and the story you record will take three hours of your time to complete. In addition to what I learn about your experiences in (insert appropriate aquatic sport), I will be talking to one of your parents and your coach about what they feel participation in (insert appropriate aquatic sport) means to you and others who participate in the program.

POTENTIAL BENEFITS AND RISKS

If you agree to participate in this project, you will have the opportunity to reflect on the meaning of your experiences in swimming as you complete the interviews, work of art, and audio recording. All of the information you provide will be combined with other stories provided by other swimmers to create vivid picture of impact swimming has in lives of youth with physical

disabilities. Sharing your stories may provide convincing voice for other organizations, parents and coaches interested in offering similar programs

CONFIDENTIALITY

Before we start the interviews I will ask you to decide on a nickname that will replace your actual name in this project. I want the nick name you pick to be one that only you and I will know. After I have collected all of the stories and information you share with me I will keep them for 5 years after I have finished this project. Access to the information you share will be restricted to my thesis supervisor and myself.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. If you don't want to answer any of the questions I ask you just need to let me or your parent know and I will move on to the next question. If you don't want to continue to participate in this project at any time before December 31, 2008, all you need to do is tell your parents. If you decide you don't want to participate in this study any longer I will not try to convince you to change your mind and will thank you for your honesty.

PUBLICATION OF RESULTS

The results of this project may be published in professional journals and presented at conferences to help increase awareness of the need for (insert appropriate aquatic program). Feedback about this study will be available by January, 2009 by contacting me the primary researcher by telephone or e-mail.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study, please let your parents know and they will contact me to provide you with an answer. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University. If you have any comments or concerns about your rights as a research participant, please ask your parents to contact the Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.

Thank you for your help in this project. Please keep a copy of this form so your parents will have a copy of my contact information and know what to do if you have any questions.

ASSENT FORM

I agree to participate in the project described above. I make this decision based on the information I have read in the above paragraphs. I have had the opportunity to ask questions and receive any additional details I wanted about this project. I understand that I may ask questions in the future by contacting the primary researcher through e-mail or telephone. I understand that I may drop out of this project at any time before December 31, 2008.

Name: _____

Signature: _____ Date: _____

APPENDIX D

INTERVIEW OPENING STATEMENT

Opening Statement: (swimmer/diver)

The purpose of this interview is to gain knowledge about the experiences of individuals with physical disabilities in the aquatic environment. As someone involved in adapted diving, you are in a position to contribute to this knowledge through a description of your experiences as a diver. That's exactly what this interview is about- your experiences in the water. The answers you provide today will be combined with information provided by other participants to identify key themes associated with programming in aquatic environment for a M.A. thesis. Nothing that is said in this interview today will be presented so that you can be identified by others as a participant in this study. As I ask you questions about your experiences in the water, I will be using a Sony ICD-P28 voice recorder to allow me to focus my full attention to what you are saying. I will also be jotting down some brief notes based on your answers to assist in analysis. The questions I'm going to ask today focus on your experiences, feeling and background in relation to diving. As we chat today, if you have any questions about what I'm asking or if there's something you don't want to answer just let me know. Do you have any questions or concerns before we start with the interview?

In order to protect your identity we will need to decide on a pseudonym (nick name) you want to use when I transcribe your interview and analysis of themes.

1

Closing Statement:

I really appreciate your willingness to share your experiences about diving with me today. The description and stories you provided are helping me understand the significance of the aquatic environment in your life.

APPENDIX E

ARTIFACT DESCRIPTION PROTOCOL

Artifact Description Athlete:**Pseudonym: -----**

Using the paper provided, draw/ create an image that depicts the meaning of your experiences in diving. If you don't want to draw or create an image, you can select an image, cut, and paste this image onto the paper provided. Once you have found this image, place the paper into the pre-addressed envelope and put it into the mail. If you can't pick one image then pick one song that describes the meaning of your experiences as a diver and write the name of the song and the artist down on the paper provided. Please complete this task and put it in the mail no later than 2 weeks after your interview.

APPENDIX F

SUMMARY OF PARTICIPANTS

Athletes

Name	Activity	About Self
Smiley	Swimmer	13 Female Third eldest child (1 older sister, 1 older brother, 1 younger sister) Younger sister on team Congenital Disability (Cerebral Palsy) Uses Power chair, walker Involved on team for 2 years
Bob	Swimmer	17 Male Congenital Disability (hand amputee) Youngest child (1 older brother) Parents Immigrants to Canada from China Involved on team for 3 years Elite swimmer, goal to make 2012 Paralympics
Missy	Swimer	12 Eldest child (2 younger brothers & 1 sister) Sister on team Congenital Disability (Cerebral Palsy & Spina Bifida) Walks without mobility aids Involved on team for 1 year
Rock Star	Swimmer / Diver	16 Male Acquired Disability (Totally Blind) Involved on team for 8 years Involved in Diving for 1 year
Chair	Diver	45 Male Acquired Disability (Paraplegic since 1982) Married 14 years Wife is his Dive buddy Diving for 3 years
Blue Mermaid	Diver	45 Female Congenital Disability (PFFD, Above knee Amputee) Divorced Mother of 2 teenage boys Diving on & off for 21 years
BB	Diver	37 Acquired Disability (Quadriplegic following a car accident) Diving 3 years

Significant Others

Name	Activity	About Self
Dora	Swimming	Smiley's mother Mother of 4 Married 20 years Middle Aged Occasional Teacher
B-Rodd	Swimming	17 Team-mate of Bob/Rock star Trains in same lane Swimming for 5 years
IDC	Swimming	Missy's father Father of 4 Retired "Full time dad"
Squishy	Diving	Adapted scuba instructor Diving since university Dives with Blue mermaid (a former student)
Sunshine	Diving	Married 14 years to Chair Works as PSW Diving a hobby she shares with her husband Something they do together

Instructors

Name	Activity	About Self
Tina	Swimming	Coach of team for 3 years
Pinky	Diving	Instructor for 1 year Dive Master for 8 years

APPENDIX G
EXEMPLAR TRANSCRIPTS/ SUMMARY TABLES

Interview # 5:Rockstar

Interview held on pool deck, swimmer wrapped in towel and blanket with his mom present. Unlike any other swimmers interviewed, he has been on the team the longest and has an acquired disability. He is visually impaired and I was blown away by the way he used language more effectively to communicate the details about the impact swimming has on his life. He may only be 16 but is mature beyond his years.

Interviewer = Int.

Athlete = Rock star

Int: So my first question is tell me a little about yourself

Rock Star: okay- I'm sixteen years old, and I'm in grade 10- um- I play the guitar- I'm a competitive swimmer- I run my own charity- so and I love doing a lot of public speaking and ambassador work for several organizations.

Int: Wow- sounds like you keep yourself busy! Tell me a little bit about your family

Rock Star: well they're really amazing- I've got a younger brother, an older sister and then my mom and dad so um- ya

Int: Tell me about your disability

Rock Star: Well I'm totally blinds- I was four years old and I had a brain tumor and the surgery to remove that tumor left me blind.

Int: How has it influenced your experiences in physical activity?

Rock Star: Well I have to find different ways to adapt the activities that I do and I can pretty much do everything anyone else can it's just different- so when I swim I feel along the lane ropes with my hand, and when I'm two strokes from the wall someone taps me on the head . I'm a downhill skier as well so someone has to go behind me and tell me right-left- right left – so –ya- everything has to be changed.

Int: So when did you start with the flames?

Rock Star: I was eight years old, so I'm 16 now so 9 years ago.

Int: What made you interested in swimming?

Rock star: Well- when I was 8- I went to a camp and tried to do- I swam across the lake there-it was 2 ½ K and I had to wear a life jacket and it took two and a half hours and when I got out I was really dizzy but it was one of the things I was most proud of that summer and a friend told me about Vicki Keith and her swim team here and I came out and tired out and the first day was one of the best days of my life I finally found a place where I felt like everyone else and was included.

Int: Tell me about some of the things you learned when you started with the flames

Rock Star: Hmm- Well- the main thing that changed my life but I learned that there were places I could go and participate in activities just like another kid- I wasn't any different I was just one of everyone else and you know give me a chance to get some physical activity and feel fit and strong and happy about myself in general.

Int: What are some of your goals as a swimmer?

Rock Star: Well I actually last weekend went to a swim meet and now I have two very close times to provincial times so I'd like to make provincials and one day go to nationals when I'm at that level.

Int: Those are some great goals- walk me through a season with the flames

Rock Star: Well normally we start in September and finish in late June- I swim three times a week- some people swim 5 or 8. Normally the beginning of the year we're starting up and getting back into stuff and then pretty much into the swim meets and you know it's always great and basically yeah- the rest of the year we'll be working up to more and more and swim meets of higher and higher levels depending on what you can achieve.

Int: So what is your family's role in your experience?

Rock Star: Well- Um- I guess they're the ones who really encourage me for everything I do- like the swim meets that first day they you know help me find out about VV and you know- sorry-

Int: What is the difference between physical activity on land and physical activity in the water?

Rock Star: Well Physical activity on land sometimes at gym class at school like in basketball or soccer I don't feel included stuff that it's really hard to participate when you can't see what's going on- in the water I feel like I'm just free and I know I am able to participate- there's nothing that's stopping me.

Int: Describe the first time that you got into the water to swim

Rock star: You mean here? First day with the team it was one of the best days of my life- I couldn't believe it -it was the first place that I had ever come to where I felt like a regular kid- had a place where I could make friends and be part of a teams and yeah it was a place where I could be myself. When I stepped on deck I met my coach and she introduced me and everyone in the pool started calling me over wanting me on their relay team and fighting over who would have me on their team- I'd found a place where people included me!

Int: How does your body feel when you're swimming and moving in the water?

Rock Star: It feels really amazing- swimming makes me feel fit and strong and when I'm in the water it's relaxing and a way I can get exercise and it's something I can do.

Int: What's the difference between swimming on your own and swimming in a practice?

Rock Star: Well when I swim in a practice I've got everyone else around me so it makes it more interesting- I've got a coach there to give me a workout and help me improve my technique- I find it much more interesting to swim in a practice.

Int: Describe your interaction with others from the moment you step into the facility to the moment you get into the water for practice

Rock Star: Um- ya- I've been coming here for quite a while and everyone is welcoming and kind here-um- I'm not just on the swim team here I'm also an ambassador so I speak at adapted physical education classes, I also help out at fundraisers and give motivational speeches so I know a lot of people around here.[mom asks about how long it takes him to get to the pool which is located at the back of the facility] Well normally it should only take 2 minutes to get to the pool but it takes 10 minutes because I stop and say hello to everyone who knows me as I pass them in the halls.

Int: Are there any particular people you look forwards to seeing when you come for practice?

Rock Star: Well- all my team mates like B-rad, Bob – um- Paige – everyone on the team are all my friends and all the life guards and all the staff at the facility are wonderful people.

Int: Describe what you hear when you step onto the pool deck

Rock Star: well- I hear that kind of background constant sound of water splashing as people kick and move through it- hear all the people talking the coaches giving

instructions for the next set and then sometimes you know the odd sound of a splash of someone jumping in.

Int: What is your routine in a typical practice?

Rock Star: Well normally, we'll start off with getting in and doing a warm up like maybe 100 or 200 meters some back crawl and front crawl and then we'll start up with the main sets that could be a couple 50's kick with a couple seconds rest in between or maybe a 100 swim and some drills and those take up the main part of the practice then at the end it will be another warm up with some dives and starts and some starts and turns at the end.

Int: What are some of the highlights of the season for you?

Rock Star: Oh- Well the highlight for me – well it only happens every 2 years but it's the Ontario Winter Paralympic Championships and all of the athletes there have some sort of physical disability and I go there – it's a swim meet and when I go there it's a place where I'm on a level playing field because everyone has a disability and so when I swim I know my time is a real time not a first because I'm blind and everyone else isn't- they adjust my time and compare that time with everyone in a certain category according to that. Another highlight every March I go to Florida for a swimming training camp with Vicki and her other team and ya- just all the swim meets and that kind of stuff.

Int: What are the things that you do in practice that are easy?

Rock Star: Um- I feel basically just the strokes I know like front crawl, back crawl or swimming a length of both have become easy.

Int: What are some things that are challenging?

Rock Star: It's challenging when my coach is showing the team some new skill or technique and I can't do what they're doing so they have to physically show me first and then I have to try to bring that into the water and that's a challenge.

Int: How do you feel at the end of a practice?

Rock Star: I feel really happy because I've been working out- I've been with my friends- I feel fit and really strong.

Int: What's the difference between a swim at a practice and a swim at a meet?

Rock Star: Well a swim at a practice- It's really just they're very similar but in a practice there isn't much to worry about you can be yourself and swim do your best- um- it's also a lot more work the practices you swim longer- the swim meets they're a bit faster pace you're doing your best swimming but at working much harder at what you do

Int: How does your coach influence what you do in the water?

Rock Star: She's very encouraging- she's always willing to get in and help me or get me out onto the deck and show me- she's always there for me!! Well I've had several coaches they've all been very different the first coach was Vicki and she's just a wonderful person with a great sense of humor and always there to help me- she still invites me to Florida every year for her training camp. Then there was Raph who was willing to help me out with my strokes and times and take me to meets. My current coach she's gotten in the water and helped me with my breast stroke.

Int: In your opinion, why are adapted swim programs necessary for those with disabilities?

Rock Star: Well swimming is a sport that anyone with any sort of disability can do and some people have said it's the only chance they'll get to do any sort of physical activity and it's good to get them in there to be doing exercise.

Int: What's the impact that swimming has had on your life?

Rock Star: Wow- its' really changed my life- um- it's made me a much happier person to be able to come in swim- be with my friends-um- made me a much stronger and fit person so I can participate in activities at school – I can run and look like a normal kid- I've made so many friends on the team because it can be hard to make friends.

Int: how does swimming fit into your future?

Rock Star: Well- I'm definitely going to continue swimming even when I'm older- I'd like to work up to the Paralympics or some national times- I also help teach adapted sport at some colleges and university- that's one thing where I can teach people.

Int: SO because of your experience in the water with swimming, were you more confident to try different forms of physical activity?

Rock star: yeah- I'd say so. I didn't try much- but swimming got me interested in trying other things- I downhill ski, I took a scuba dive course and I did sky diving and I love sports like rock climbing and water skiing and that's what got me to realize there's so much out there that I can try.

Int: Since you dive- what's the difference between a swim and a dive?

Rock star: What I love about diving is we have a cottage and I like to go see along the bottom and explore under the water and now I can do that for longer periods of time. It's such a relaxing kind of experiences- it's almost like a dream to just stay under there

Int: With diving do you have any goals?

Rock star: Just mainly getting certified, we're working on that and I just have to do a few deep water dive and open lakes and then I'll be able to go out with just another partner and that's basically what I want.

Int: Do you have any specific places you want to dive?

Rock Star: I'd love to check out an ocean- that's got an interesting bottom and stuff that I could perhaps feel

Int: What specific equipment do you need to do?

Rock Star: I have to get different certification because I'm blind, I've heard they do have some talking aids which we are thinking of checking out.

Int: Describe the type of freedom you experience in the water for both diving and swimming

Rock Star: Sure- the freedom is – when I'm walking around I know there could be stairs or curbs- when I'm in the water I know there's nothing in my way – I can go anywhere and know that I won't hit anything and I don't need someone to tell me where to go and yeah- just such a relaxing feeling- just gliding through the water.

Int: When you started swimming and Vicki was your coach what were some of the first things she taught you about being in the water?

Rock Star: Well- the first things I did I really tired front crawl and it was a real challenge so she broke it down into different steps like how to move my arms and then the back stroke and slowly brought me up to the actual correct form/ technique. One more thing I can tell you I am now $\frac{1}{2}$ second away from the Can-Am times in my back- I took 4 seconds off of my time! So the swim meet I went to yesterday I was a half a second off- so that's my new goal to make it for the summer

Int: Did you ever take swim lessons before joining the team

Rock Star: Yeah- when I was like 5 or 6 and I always loved it- but the team is where I started learning technique and getting comfortable in the water.

Life World Existential Table- Rock star

	Quotes from Transcript
Lived Body	<p>p. 1 “ so when I swim I feel along the lane ropes with my hand, and when I’m two strokes away from the wall someone taps me on the head.” (BODY)</p> <p>p. 2 “ give me a chance to get some physical activity and feel fit & strong and happy about myself in general” (BODY)</p> <p>p. 3 “ It feels really amazing- swimming makes me feel fit & strong A way to get exercise and it’s something that I can do.” (BODY)</p> <p>p. 3 “ when I’m in the water it’s relaxing and a way I can get exercise and it’s something that I can do.” (BODY/SPACE)</p> <p>p. 4 “ basically just the strokes I know like front crawl, back crawl or swimming a length of both have become easy” (BODY)</p> <p>p. 4 “I feel really happy because I’ve been working out..... I feel fit and really strong.” (BODY)</p> <p>p. 5 “made me much stronger and fit person so I can participate in activities at school.” (BODY)</p> <p>p. 6 “ The team is where I started learning technique and getting comfortable in the water.” (BODY/SPACE)</p> <p>LE “I’d been to other swim meets before and done pretty well- but I got into the water and started my race and it just felt different to me- really felt like I was moving.” (BODY/SPACE)</p>

Lived Space	<p>p. 2 “a friend told me about the team here and I came out and tried out and the first day way one of the best days of my life- I finally found a place where I felt like everyone else and was included.” (SPACE/RELATION)</p> <p>p. 2 “ I learned that there were places I could go and participate in activities just like any other kid..” (SPACE/RELATION)</p> <p>p. 2 “Well physical activity on land sometimes at gym class in school like in basketball or soccer I don’t feel included... it’s really hard when you can’t see what’s going on- in the water I feel like I’m just free and I know I am able to participate- there’s nothing stopping me.” (SPACE)</p> <p>p. 3 “ First day with the team it was one of the best days of my life.... It was the first place that I had ever come where I felt like a regular kid- a place where I could make friends and be part of a team.... A place where I could be myself.” (SPACE/RELATION)</p> <p>p. 3 “ when I’m in the water it’s relaxing and a way I can get exercise and it’s something that I can do.” (BODY/SPACE)</p> <p>p. 3 “ I hear that kind of background constant sounds of water splashing as people kick and move through it- hear all the people talking the coaches giving instructions for the next set and then sometimes you know the odd sound of a splash of someone jumping in.” (SPACE)</p> <p>p. 4 “ Ontario Winter Paralympic Championships ... it’s a place where I’m on a level playing field...” (SPACE)</p> <p>p. 5 “it’s good to get them in there to be doing exercise.” (SPACE)</p> <p>p. 5 “swimming got me interested in trying other things- I downhill ski, scuba dive, sky dive, rock climb... got me to realize there’s so much out there for me to do.” (SPACE)</p> <p>p. 5 “ what I love about diving ... I like to go see along the bottom and explore under the water” (SPACE)</p> <p>p. 5 “ The freedom- when I’m walking around I know there could be stairs or curbs- when I’m in the water I know there’s nothing in my way- I can go anywhere and know that I won’t hit anything and I don’t need someone to tell me where to go... it’s such a relaxing feeling just gliding through the water.” (SPACE)</p> <p>p. 6 “ The team is where I started learning technique and getting comfortable in the water.” (BODY/SPACE)</p> <p>LE “I’d been to other swim meets before and done pretty well- but I got into the water and started my race and it just felt different to me- really felt like I was moving.” (BODY/SPACE)</p> <p>LE “ I was 14 and I went to my first Ontario Winter Paralympic Championship and I’d been to other swim meets before and done pretty well.... It was a special and wonderful thing swimming a best time and knowing that that medal was realy- and it wasn’t just because I was blind and I was on a level playing field.” (SPACE/RELATION)</p>
Lived Time	<p>p. 4 “they’re very similar but in a practice there isn’t much to worry about you can be yourself and swim and do your best- it’s also a lot more work- the practices you swim longer- the swim meets they’re a bit faster pace you’re doing your best swimming but at working much harder at what you do.” (SPACE/TIME)</p> <p>p. 5 “ what I love about diving is to go see along the bottom and explore under the water and now I can do that for longer periods of time.” (SPACE/TIME)</p>

Lived Relation	<p>p. 1 “ well I have to find different ways to adapt the activities that I do and I can pretty much do everything anyone else can it’s just different.... Everything has to be changed.” (RELATION)</p> <p>p. 2 “a friend told me about the team here and I came out and tried out and the first day way one of the best days of my life- I finally found a place where I felt like everyone else and was included.” (SPACE/RELATION)</p> <p>p. 2 “ I learned that there were places I could go and participate in activities just like another kid- I wasn’t any different- I was just one of everyone else you know give me a chance to get some physical activity and feel fit and strong and happy about myself in general.” (SPACE/RELATION)</p> <p>p. 2 “ physical activity on land sometimes at gym class at school like in basketball or soccer I don’t feel included... it’s really hard to participate when you can’t see what’s going on- in the water I feel like I’m free and I know I am able to participate- there’s nothing stopping me.” (SPACE/RELATION)</p> <p>p. 3 “ First day was one of the best days of my life- it was the first place that I had ever come to where I felt like a regular kid- had a place where I could make friends and be part of a team... a place where I could be myself.” (SPACE/RELATION)</p> <p>p. 4 “ Ontario Winter Paralympic Championships an all of the athletes have some sort of a physical disability ... when I go there it’s a place where I’m on a level playing field because everyone has a disability and so when I swim I know my time is a real time, not a first because I’m blind and everyone else isn’t’- they adjust my time and compare that time with everyone in a certain category.” (SPACE/RELATION)</p> <p>p. 4 “ I feel really happy because I’ve been working out – I’ve been with my friends- I feel fit and really strong.” (BODY/SPACE/RELATION)</p> <p>p. 5 “swimming is a sport that anyone with any sort of disability can do and some people have said it’s the only chance they’ll get to do any sort of physical activity.” (SPACE/RELATION)</p> <p>p. 5 “ it’s made me a much happier person to be able to come in and swim- be with my friends... it’s made me a much stronger and fit person so I can participate in activities at school.... I’ve made so many friends on the team because it can be hard to make friends.” (SPACE/RELATION)</p> <p>LE “ I was 14 and I went to my first Ontario Winter Paralympic Championship and I’d been to other swim meets before and done pretty well.... It was a special and wonderful thing swimming a best time and knowing that that medal was real- and it wasn’t just because I was blind and I was on a level playing field.” (SPACE/RELATION)</p>
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Lived Experience Description- Rockstar

This story happened two different times- but I'll go with my favorite-So-um- the first one I was 14 years old and I went to my first Provincial Winter Paralympic championship and I'd been to other swim meets before and done pretty well- but I got into the water and started my race and it just felt different to me- I had you know really felt like I was moving. I finished that race and got out of the water and a minute later my name was announced on the PA- my name was announced along with three others- I wouldn't let my coach bring me to get my towel, the rushed me down to the other end and this was the medal ceremony so I was up there- they start off with my name- they first gave me the bronze- then they called my name again and gave me the gold- so you know my heart sank when I got the bronze – I was feeling happy but you know I was wondering-but then they realized they made a mistake- the gold was mine- and it was a special wonderful thing- swimming a best time and knowing that that medal was real-and it wasn't just because I was blind and I was on a level playing field. Then this year I went to the same – um- event for the swim meet and again I did my two races- everything went pretty well- I felt like I did a good job and again I heard my name after both races and I had got two more medals and beat my other gold medal time from the previous year and those were the two best swim meets of my life- nothing could have beat those. The second one had a special meaning- I had just spent 9 months in hospital I'd had 6 surgeries, 6 months of chemotherapy and radiation and a month after all that I went to the swim meets feeling very tired, no energy and was quite sick- but I just got in and told myself I was going to try my best and I still beat all my times and got those two medals.

Keywords Rock Star:

Keyword	Quotations/ Location in Transcript
Equality	<p>p. 2 “ I came out and tried out and the first day was one of the best days of my life- I finally found a place where I felt like everyone else and was included” (SPACE/RELATION)</p> <p>p. 2 “I learned that there were places I could go and participate in activities just like another kid- I wasn’t any different- I was just one of everyone else.” (SPACE/RELATION)</p> <p>p. 2 “Physical activity on land in gym class at school like in basketball or soccer I don’t feel included- it’s really hard to participate when you can’t see what’s going on.” (SPACE/RELATION)</p> <p>p. 3 “ First day with the team it was one of the best days of my life- I couldn’t believe it- it was the first place that I had ever come to where I felt like a regular kid- a place where I could make friends and part of a team- where I could be myself.” (SPACE/RELATION)</p> <p>p. 4 “ Ontario Winter Paralympic Championships- all of the athletes have some sort of disability- when I go there it’s a place where I’m on a level playing field because everyone has a disability- I know my time is a real time – not a first because I’m blind and everyone else isn’t.” (SPACE/ RELATION)</p>
Freedom	<p>p. 2 “ In the water- I feel like I’m just free and I know I am able to Participate- there’s nothing stopping me” (SPACE/BODY)</p> <p>p. 6 “ the freedom- when I’m walking around I know there could be stairs or curbs- when I’m in the water I know there’s nothing in my way- I can go anywhere and know I won’t hit anything and I don’t need someone to tell me where to go.” (SPACE/ RELATION)</p>
Comfort	<p>p. 3 “ it feels really amazing- swimming makes me feel fit and strong and when I’m in the water it’s relaxing and a way I can get exercise- it’s something I can do.” (BODY/SPACE)</p> <p>p.5 “what I love about diving is we have a cottage and I like to go see along the bottom and explore under the water- now I can do that for longer periods of time. It’s such a relaxing experience- it’s almost like a dream just to stay under there.” (BODY/SPACE/TIME)</p>
Physical Exertion	<p>p. 2 “ gave me a chance to get some physical activity and feel fit and strong and happy about myself in general.” (BODY/SPACE)</p> <p>p. 3 “it feels really amazing- swimming makes me feel fit and strong and when I’m in the water it’s relaxing and a way I can get exercise- it’s something I can do.” (BODY/SPACE)</p> <p>p. 4 “I feel really happy because I’ve been working out- I’ve been with my friends and I feel fit and really strong.” (BODY/RELATION)</p> <p>p. 5 “ it’s a sport that anyone with any sort of disability can do- it’s the only chance they’ll get to do any sort of physical activity and it’s good to get them in there doing exercise.” (SPACE/BODY)</p> <p>p. 5 “ It’s made me a much happier person to be able to come in and swim, be with my friends, made me much stronger and fit so I can participate in other activities at school.” (BODY/SPACE/RELATION)</p> <p>P. 5 “ got me interested in trying other things- I downhill ski, scuba dive, sky dive, rock climb- that’s what got me to realize there’s so much out there that I can try” (SPACE)</p>

Diver Interview Transcript:

Location of interview on campus at Brock.

Interviewer = **Int.**

Diver = *Blue Mermaid*

Int: Tell me a little about yourself

Blue Mermaid: um- I'm 45-46 this year- um- I was born with a physical disability- um- I'm missing my left femur- it's called PFFD- and also a dislocated hip- lots of surgeries as a kid- lots of things that I was good at as a child- or at my parents saw a comfort level there was swimming. I went to various camps and was always in the water there and I- they kind of threw me into swimming lessons- literally and into the pool and I just took to it- and so um- swimming has been a big part of my life. I swam at Easter seals camps, I progressed through the ranks- I was doing very well and my dad heard about Paralympics- at that time it wasn't called that- this was back in 1976 and he called and said "hey they have athletes with disabilities and you should look at this" and uh-this was in Etobicoke in 1976 and so he went and got me involved in our local swim team- I was sort of I guess doing integration before I knew what integration was [laughs] and I was swimming with able-bodied swimmers and trained with able-bodied swimmers with the permission of the coach- my dad when I think about it now you know as a parent myself now I think "wow that was pretty brave of him to go and do that!". Anyways I did that for quite some time- from the time I was 12 to the time I was close to 20, 18 I believe and swam, got involved in regionals, provincials, national and at the international level with the Paralympics [moves hand in step-wise manner with each level of competition indicating there is a linear progression]- I went to the 1980 Olympics in Amend Holland – and then I went on to university and kind of retired from swimming-um- yeah- and then- yeah- life goes on right – so I have a disability and I work in the field of accessibility coordination- it's a passion of mine. I've come back to athletics in the last few years- mostly for health and stress reduction and just the water calms me so- and yeah- and through some challenges in life I needed an outlet- so I did walking for a bit. As much as I like walking – I got into doing some 5K walks and things It was more of a- um- more of a- actually walking is a hard thing for me- I'll do it- but not much fun. I like to think I'm athletic- I did my undergrad in recreation at Waterloo. I majored in special populations is what they called it back then- and so yeah. I have two kids now- I live on my own now – I'm divorced. I live in Niagara-on the Lake and I've been there for 2 years with my teenage boys, one is 16 and one is 13. Part of swimming and diving for me is I'm trying to get the youngest one involved in it- and it's again and outlet for me to relieve stress when you're raising two teenage kids on your own and/or just work stress is huge right- so –um – swimming- scuba- whatever that water it soothes me. So that's me!

Int: How long have you been a diver?

Blue Mermaid: aaaahhh- let's see. I started diving- I did my very first dive – this is funny actually- on my honeymoon with my husband. I'd always been interested in swimming and diving was something I was like “oh – I want to try this”. So we went to the Bahamas and we took a-oo- what do you call that [pauses to think of the word]- we took a resort course in the pool and it just so happened the guy who trained me was with UNESCO and he had trained other people and had had other people with disabilities through US clubs dive there- so he was a great instructor for me- so that was in 1988. Yeah- first dive in the Bahamas to 35 feet and that was it- I was hooked! I still have pictures [laughs]

Int: So what made you interested in diving?

Blue Mermaid: Uhm- I think for me I just like water sports- “*In- on- or near the water*” is my motto [laughs]. So in the water- swimming/diving- I probably did snorkeling before that. On the water- well I've tired sailing-it's too technical [laughs] **too Blahhh** – you know um and just being near the water – it's just a love of water. I think it was just curiosity right and thinking well hey I'm a good swimmer- I'll be comfortable in the water. And sure enough just throw me in the water and I'm as good as a fish- literally- so – [laughs].

Int: Describe some of the first skills you learn as a diver

Blue Mermaid: um- after the course at the resort I came back to Ontario we were trying to find someone to dive with and I found a group out of Oakville-it's not around now- a volunteer organized group called Club challenge and for whatever reason I called the dive master- this was before the internet- we're still in touch today and I said “*Hi you have this club and I have a disability*” and he was like “*okay-so what kind?*” [in deep male voice] and I said “well one leg” and anyways some of the skills he taught me were getting comfortable in the water, um- buoyancy stuff- learning to clear to go down- to clear the air when you go down- if you can't it's painful and could be damaging – and to be calm in the water and the thing they always engrained in your head was safety- you must always have a buddy. And the club I dove with in Oakville they insisted that we bring a buddy- so yeah.

Int: so what are some of your goals as a diver?

Blue Mermaid: Hum- I think some of the goals I have as a diver are to dive in the blue lagoon- I did a lot of diving in the 90's I did a lot of diving in the Caribbean with that club- I had never up until last year gone diving in Ontario so in the fall of 2007 I contacted a group and got hooked up and got my advanced open water HSA and did my certification last August and dove 15 times last year between Brockville and Kingston, I also went to Gaspé and dove in the Atlantic and in a quarry here in Niagara. I don't know if I have the technical skills to go for my rescue or cave diving or wreck diving. My goals are to enjoy it and to see and get places and be in the water in beautiful places in the country in warm water- I've got to admit it's not that nice being in cold water but you do

it [laughs]. So those are some of my goals- just to see the beauty and the marine life in water and yeah I have seen a lot of marine life.

Int: Describe the differences between physical activity in land and physical activity in the water?

Blue Mermaid: Um- yeah- I probably spoke to some of that earlier-. On land- um-um- mastery is an issue- I'm not going to play tennis- I mean I could but it's going to be pretty bad and I'm going to get frustrated so mastery is difficult especially in sports that require running and mobility and things like that- um- walking I will do just because I am in need of something to help in stress reduction-but again- I do it and it's more of an effort. It takes more of an effort and again it's not- well I wouldn't say it's not pleasurable- but it's not as easy -to be honest I've done a number of things- but the mastery thing it just comes easier for me in the water than it does on the land. I don't need my leg- when I walk I do use my leg and I use a cane for balance and speed. Once I get going I have momentum- where as in the water well I don't need a cane and I don't need anything to lean on and that freedom of not having an artificial leg it's great. I have a swim leg- but I only use it to get onto the beach or to be on a boat for stability- but that thing comes off and I'm happy to be free of it [laughs]. It's mostly the mastery.

Int: So describe the first time you got into the water for a dive

Blue Mermaid: It was in the Bahamas in 1988-it was beautiful weather. It would have been very hot weather there- it was august- the water was gorgeous and the ocean was blue- the Caribbean air and the Caribbean Sea. The clarity of the water you could see at the bottom and everywhere, there was tremendous adrenaline rush for me- excitement getting in and you're not in a pool- truly open water- so getting in - yeah excitement- calm though- I watched others in our group panic a little bit- they get in the ocean and they don't think they can do this- it's different than in the pool- and then we get in the water and started to submerge and were going down- and we actually did the dive and before I knew it - it was over and I was like - it will go up as one of the most memorable experiences in my life- to be under the water near the fish- and I think most divers will say the same thing- they never forget the first time.

When I went up to Gaspe last summer with the other divers with disabilities *um*-there was a 16-17- 19 year old and we'd all just been certified and it was his first dive in the open water and he was just high after he got out of the water- he was just flying high- and *ah- yeah- wow*- he wanted to go back there so yeah. That's my description. I probably talked in circles about it!!

Int: That's fine- I can picture myself there in that situation.

Blue Mermaid: Yeah- that-the connection with your buddy and listening to the dive master and *um* people are very helpful and I think - I guess deep down I really do enjoy nature- whether it's on land or sea- but being in the water I'm comfortable and just seeing the fish and the color- *um*- yeah- it's great.

Int: Describe how your body feels when you move in the water

Blue mermaid: **Um-** it feels good- neutral buoyancy right- that's where you're not going up or going down- you're actually floating- I think it's that feeling for anybody that's wild- **um-** I have learned through my advanced course to really master that it's required for that- it's nice- I've had people say and able-bodied divers say "wow- you're really comfortable in the water with your buoyancy" you know- but it's with practice and comfort in the water. I think it's that feeling **um-** of floating- you know when you use your arms- it's also quiet you know what- quiet all you hear is the water the **luwp luwp luwp** or whatever the sounds are- I like them you know it's not like there's music blasting it's just very- yeah- that water feeling around you and that floating feeling. When I was in the Caribbean I remember hearing while I was under the water a cruise liner starting- that's not a nice thing to hear when you're under the water **[laughs]** that Whulluuushh (**sounds of a horn**) the big thing starts up and you're like "Where did that come from?" and it's miles away from you -but the fact that you hear that thing makes you think of what that might be doing to the underwater environment- but **um-** yeah the floating and the silence. You hear your own breathing- actually you know what you're conscious of your breathing and you're hearing your breathing and you become almost in tune with your breathing- you hear your regulator – **Shhhh-Phhhooo-** there's something almost hypnotic about your breathing.

Int: So when you dive- are you aware of the other divers around you or do you just focus on your dive buddy?

Blue Mermaid: **um-** **um-** I'm definitely focused on eye contact and facial contact with my buddy. **um-** Do I pay attention to the rest of the group? Yeah- I'll look around but primarily you know I'll maintain visual contact with- unless I'm put in a group of threesome or all together- **um-** yeah- so I'm not really- everyone's sort of doing their own thing. I mean you get your brief- you're briefed up top and then you follow the directions of the dive master and you're all free to go- but I prefer to follow rather than lead. I have lead before **um-** I guess you are aware- I'm more aware of my buddy and making sure they're okay and making sure I'm okay. We did a dive back in the St. Lawrence last summer and it was eye to eye contact all the way down so- **[laughs]**.

Int: So tell me about your interaction with other people from the time you enter the facility to dive in a pool or get onto the boat to the time you get into the water for a dive?

Blue Mermaid: **Um- um-** often when you dive as a group there is a briefing before you get onto the boat- or even before you leave the shore about the dive and so you're listening to that and to the dive master or the operator - **um-** you're following instructions about when you should be gearing up- you're interacting with your buddy and checking helping them – like sometimes I need help- I can't lift the tank because of my balance- I just can't and so I'll need help with that and so you're checking there and you're shooting off and laughing with people and talking too- you're listening to the guy driving the boat tell you stuff about "well there was a wreck here in the 18 whatever"- there's a lot of

social connection and interaction and primarily though focused on helping each other gear up- make sure you're okay- making sure doing what you've got to do- helping other people you know do up the zipper on their wetsuit. I dove with an arm amputee and she would have tremendous trouble putting her wet suit over her stump- you know tag team on that- it takes more effort now than it used to. Even with able-bodied divers, I would say I've been the diving as the most "able" person among divers with disabilities and I've also been the only disabled diver among able-bodied divers and they're all helping each other -so they don't mind helping me. Talking about the water-talking about what's going to- has anyone ever been here before on a dive- what do they think- that sort of thing.

Int: So walk me through your routine in a dive

Blue Mermaid: **Unhum-** my routine- **um-** I'll even go back even further say if I want to join a group I'll have to think about where it is- I have to think even do I wear my leg to the dive or do I go on crutches- if I wear my leg where do I leave it [laughs]? It's all very strategic in how it all works out for me [laughs]- **um-** if I wear my leg then how far away from the shore am I going to be and is that going to be too difficult to carry all my gear back up- I try to buy equipment even that isn't really heavy- I try to find out ahead of time if we're doing a shore dive or are we doing a dive off a dock and then in the quarry are we doing a boat dive- because that all affects how and where I'm going to place myself and I've learned that if I get on a boat with able-bodied divers then I want to be closest to where we're going because I don't want to be on crutches to get to where we're getting off the boat- If I'm diving with a group of people and we all have a disability then we're all fighting for the good spot on the boat and we're all doing that-there's a lot of strategy and planning but it's not any different then when I plan to go somewhere right- I think do I have to go up the stairs or is there an elevator- right- so you know- getting my equipment ready, finding out how far do we have to walk- do I need my artificial leg- where do leave my artificial leg so it doesn't get wet? Because that's happened [laughs]- you know so where do I store my leg and where do people in wheelchairs store them and then gearing up- I get as much of my gear on as I can either before I get there or um- ah- when I get on the boat -try to minimize as much stress I don't want to hold anyone up- and I don't want to get held up- have stuff on- and then I wait and I ask the either the dive master when the time of the dive is- when do I need to gear up- and all these things usually fall in place. I usually wind up it's not very graceful- bumming it to the edge of the boat- because I don't want to fall and hurt myself so bumming it is you know the way I go- and I get my dive buddy or the dive master or the operator to bring my BCV and my tank over behind me and I get right to the edge and I've learned tips on how amputees get into the water easier so I get all geared up- I'll do my check on equipment with my buddy and get into the water. I think for me it's the strategizing and thinking ahead about where do I put stuff? Where do I leave my leg? Do I need crutches? You know all these things come into play- usually it's not that hard but it takes a lot of planning- often because I would prefer to have my leg on to the last possible minute and then take it off- when I have it on- If I can get as much of my stuff on on two legs and then carry it down to the docks I feel much better- it's a lot of flipping planning!!

Int: Tell me about some of the equipment you use when you dive

Blue Mermaid: **Unhum-** alright I use pretty much everything everyone else does- except this year because I did some diving in Ontario I have a modified-adapted – custom fitted wetsuit- that doesn't have two legs- which is good that is custom fitted to my one leg and my stump it has a purge valve on the bottom so can release all the water- I don't need two fins- that's the standing joke- I went into the dive store and said "can I have a 2 for 1 special" because really I'm never going to use the left fin like does anyone have an extra.- they were great. **Um-** you need a mask, gloves, hood, gel for keeping the mask unfogged, snorkel, regulator, something to much when you get out of the water- **um-** you know of course swim suit under the wetsuit- **um-** lots of towels and your standard dive gear. Dive gear can be expensive so watch for sales- dive tables, dive log, next year I'm saving for a dive computer as my last big purchase.

Int: So what activities are effortless/ easy to do in the water?

Blue Mermaid: **Um-** floating, the buoyancy- I don't know there's something – is it effortless- I learned this year I got very good instruction from a dive master of mine and a teacher on how to save a lot of energy because as an amputee how to move in the water kind of like bicycling rather than gliding- so I was moving my one leg like mad and wasting all this energy- I'm trying to master my movement to save energy because you use a lot of energy getting geared up by the time I get in the water I'm exhausted- most things going down, getting up- practice like anything- I swam through some wrecks this year- I did a night dive- I've done 2 or 3- my first dive was not a good experience- it was a little too dark, this one I did this year we lit up the river so I could see everything.

Int: Is there anything that is challenging or difficult to do?

Blue mermaid: **um-** getting out of the water can be a challenge- **um-** when I look at myself in comparison to some other people I think they have a bit more of a challenge than myself- I mean I to me I think they have a bit more of a challenge getting into and out of the water- so myself I think they have more of a challenge than myself. When you get out obviously you have to grab onto the stairs- hold on and make sure there are people up there who know you're going to need help- passing up your tanks and weight belt and BCV- passing your fins off- coordination issues and sometimes that last thing is getting onto the boat as you're tired and I'm older now so I feel it- so getting onto the boat- not getting in so much- I think multiple dives would be difficult to do I just don't have it in me!! As I said getting from where I'm sitting to the edge to get into the water- it's not graceful and getting out. The thing with diving and how different it is from swimming is that I shouldn't be splashing about in the water creating all kinds of stuff- it forces me to slow down where as swimming I can rip up a pool and it's different right- so that's the biggest challenge for me- getting back out onto the boat- or a dock. Shore diving is very hard because I 'm tired and then people will run up to me with my crutches and I haven't even balanced yet and I have to make sure I get balanced so I don't fall back into the water.

Int: So what's the difference between a dive in a pool and a dive in a lake or an ocean?

Blue Mermaid: **um-** in a pool- having that security of 4 walls around you and that clarity and having your instructor a few feet away and your buddy- when you're in the ocean you don't have that safe environment and 4 walls around you and that safe environment with the life guard and you don't have the same visibility and it's wild and there's things swimming around and it can be choppy- you're dealing with the weather- I've been out when it's been sunny and all of a sudden it's pouring- I've been out when it's really hot and sunny and you're afraid you're going to get burned- so the weather conditions- the security of the pool- suddenly it's like "WHOA" this is why they call it open water- [laughs].

Int: So how do you feel before a dive?

Blue Mermaid: Good questions- on my first dive of the year- last year I hadn't been in the open water diving for a while (I stopped in 2004) so I had not been in the water for 4 years- even if I had been- I think the first dive of the year or the first dive anytime - anywhere you're not nervous but you're not relaxed for sure the same way you are by the 6th dive of the trip or the 5th dive of your summer- you feel a little rough around the edges- so the first dive is kind of nice I guess- it's like riding a bike you don't forget- I find the first dive a bit challenging to keep myself calm and focused and you can do this remember you are trained- so- yeah- and if you have had a significant amount of time out of the water then all the more challenging like squishy took me in the water for the first time in 4 years- yeah- poor squishy it was heading in the direction of things going wrong- and the plan just wasn't there - but it didn't and I had equipment problems and by the end of it I was like you must be very frustrated- and she was like "no no no" and I was quite anxious about getting there on time and getting ready things like that.

Int: And how do you feel after a dive?

Blue mermaid: Oh- after a dive I always feel great! I mean unless I'm not feeling well- you know you shouldn't dive if you're not feeling well. I've come out not feeling well you know if you've had too much sun or um then I guess you're not feeling great- but most dives very happy, very elated, very pleased, very "did you see that" kind of thing, very "WHOO HOO!" and that sort of anxiety- you put that anxiety to bed- and now I remember why I came to Florida in the first place.

Int: And how do your instructors influence your experience in the water?

Blue mermaid: Hmm-that's a good question. I think they can be a little hard on themselves- I know I have. I think when you have an instructor I think they make or break you in any sport- whether it's the coach by supporting you when you struggle to learn a new skill, by "I'm here with you" their words- **um-** "you're going to have the time of your life" - I've had some pretty good dive instructors. But when you're under the water and they give you the thumbs up- well not the thumbs up because that means you go up- but they're giving you an okay and seeing if you feel okay and just the support

from them- the technical end of it- they're cheerleaders in so many ways and it's the safety aspect of it too- don't worry- I'm here- I wouldn't let you do this if you weren't ready- we've talked about this- you know- very much as a coach- they're not criticizing – you know if you do something wrong under the water you come back up and you talk about it on the boat or we'll reconnect.

Int: So in your opinion why are adapted scuba programs necessary for people with physical disabilities?

Blue Mermaid: **um-** I think **um-** in my opinion – **um-** it's good to have them because I guess I've always believed or I've always thought that it's nice to be around people who are similar in initiative and in interest and then to have those people who are trained and willing to work with our unique needs and who for example will coach me on not bicycling on my kick- to follow through with my knee-**um-** its good in so many ways to have that camaraderie- that friendship that support that you know – I mean I've been diving for a number of years and I remember last year watching people who had never done an open water yet give that support to each other and that “*see- I told you that you would love it!*” you know. I firmly believe in choices for people with disabilities – so to stay with an adapted club- or to go to an integrated group or do both- **um-** some days you know you just don't want to have explain to people about your disability- not that you have to- some days you just want to be around people with similar challenge outlook and knowingness to do something that a lot of people probably told you that you can't do. It's a common culture- common values- yeah- some of the people I've met with disabilities who dive I have stayed in touch with for a long long time.

Int: So what is the impact that diving has had on your life?

Blue Mermaid: **Hmmm-** that's a big question. For me it's great- the impact its had on my life: Friendship, mastery of a sport, **um- um-** travel- places some people will never see, marine life that some people will never experiences, experiences some people will never have except for the people I run with- freedom in the water- something that carries over into your life-**um-** if I want to advance I can- also for me I came to Niagara not knowing people so I thought it would help me get out and meet more people- I didn't get around to it last year- so this year will be my year – I went out a few times last year with my instructor Squishy- but I joined the Niagara Diving Association and It's opened doors for me to meet able-bodied divers and dive like everybody else it doesn't matter that I have a disability. I went out last October I went to an underwater pumpkin carving contest through a dive store and the Niagara diving association in a quarry in Fort Erie and it was a beautiful fall day and I met all kinds of people and I've added them to my facebook and like I'm getting invited to things- for me it's a social thing- it's had a huge impact on my life and like I said I've known people since I got certified in 1992 as a disabled open water diver and they're watching the latest adventures and I met some people last year that I met in Quebec/Ottawa and I was immersed in French culture when I was in Quebec last summer and it's something I hope I can share with my teenage boys.

Int: What was the process that you went through to get certified?

Blue Mermaid: Well the first time I did my Basic- my open water diver extensive pool time- but I think that's for any diver certification pool time, written test and open water certification. We were fortunate enough at the time I did my open water certification in the Caribbean so that was all the lead up with classes and the pool and then studying and finally the open water. Same with last year- lots of reading, studying and pool time, which was good since I'd gone 4 years without any time in the water- *um*-getting my gear updated. I've got it in my log- over a long weekend last summer it's similar to able-bodied divers and then you get your card.

Int: So how do you hope diving fits into your future?

Blue Mermaid: *Ooohhh* – I don't want it to go away- [laughs]. I hope that actually to be honest with you I hope to dive locally- I hope to do more in terms of getting involved in the Niagara Diving Association- to keep my hand in both worlds- the adapted/disabled diving and able-bodied diving- to share my love with other people- to *um*- I e-mailed the publisher of abilities magazine to ask about where I could get hooked up with disabled diving in the Niagara region- and it took him a couple weeks to get back to me and he sent me a list of links and he gave me a link out of Ottawa and out of Buffalo. I went up to Buffalo and they had a "try a dive" day out of a community college just over the river from Fort Erie so I went and I got in the water with some folks who were probably Iraqi vets and it was certainly very inspiring but also very sad to see men's bodies ravaged by war- but they were willing to try in their case it was part of their rehabilitation- but it was a new experience for them. I want to go on more trips in Ontario- I've never been to Tobumory.

Int: So the group that you hooked up in Canada- how did you hook up with them?

Blue Mermaid: Well the club that I hooked up in the 1990's was club challenge and it was organized by a group of volunteers who got non-profit status and got funding- I'm not sure if it was provincial or federal funding through grants to purchase equipment and it started with a man and a woman- a couple who saw value in getting people with MS into the water and really their core group of divers initially were people with MS and started booking pool time- doing training with people- going to dive and planning trips and I hooked up with them- they were very informally organized- I mean they had a terms of reference and they had a charitable number. The group I went on the last trip in 2004 and it folded and the volunteers- truly a grassroots organization- no one was getting paid and it was becoming a lot for them to do- to train and they were like you know what someone else has to take this up and I think other things were happening. The group that I got involved with in 2007 was called Freedom at Depth and the director is affiliated with the international Handicap Scuba Association- very formal. Out of Ottawa and I guess I'm willing to go wherever to get trained. So I ended up going to Ottawa and the way I found out was that the dive master was coming to Brock to do a demonstration and I found out by accident and I said no one told me- I would have promoted it too you know- so I went out and got involved and then the Niagara Divers Association has been around for a while and I heard about them through Squishy and the store. Facebook- divers can

communicate on facebook and say where they're going to be diving- you can thank diving for getting me on facebook. Club challenge was out of Oakville I still have a t-shirt and lots of pictures, Freedom at depth I dove with them last year and I'll dive with them again this year- I don't care how far I have to go and the group in Buffalo is through a Dive store- I don't know if they have a branch- I'm nervous about going over there if they feel comfortable having a Canadian diver. I'm hoping – I don't think I have the strength to be a dive master- but I hope to support and mentor other divers with disabilities.

Int: Well thank you so much for sharing all that information with me- it's an absolute pleasure to hear more about something that's interesting to me and something that I never knew existed before- it's so well hidden!

Blue mermaid: Yeah- it's funny because diving is- um- [pause] it's not for everybody- I think why I got into it was with club challenge and it's an important thing was that they helped offset the cost – which is a huge barrier to participation for people with disabilities so they lent you equipment and they helped offset the cost of the trip and they reduced the cost of- actually my first dive group I didn't have to pay for my certification- recognizing that cost is a barrier not just for able-bodied divers but for people with disabilities who might be on limited incomes. I think another issue is access to transportation- you need a car and someone who will get you to where you're going or go with you- or buddy up with you to go- so um- yeah – it's hidden and it's also like golfing- I know golfing isn't cheap- but there is a cost of getting there- green fees and some people with disabilities are quite lonely- so diving might be a solution. I guess one thing that I would like to eventually do is provide enough money that would offset the cost of someone with a disability to learn how to dive- but as a donation. The other thing is physically you have to pass a medical – although I've seen people with very high levels of disabilities dive. I think there are a lot of people with disabilities who get certified and unless they have a partner or really close friends then they find it difficult even when they dive with a club to have someone step up and say "I'll be your buddy" . I know I've personally felt that I don't want to be a burden- I have to caution them when I go out with them- so having that close friend who's willing to get into that with you- that's good- other than that- it's I've seen a lot of people after the fact kind of languishing " well who's going to dive with me?".

Int: Well thanks so much!

Blue Mermaid: Oh- no problem!

Lived Experience Description: Blue Mermaid

Um- I think the story I have would have been back in- one of the dives back in the 1990's when I was first certified as an open water diver. My dive master in Club Challenge- um- we were on a trip to Grand Caymen and we did a wall dive and you go down quite deep and there's a wall that drops off into infinity [laughs] and um- um it was the deepest dive I'd ever done at that point- the prettiest dive – above 50- 60 feet the colors, once you get below that the color goes so- this was a deeper dive- a wall dive and I think what happened in this dive that I won't forget was um- I was with him- and he went to the wall and went over the edge and he just hovered and I was like wow- this was like infinity and beyond below and I am hovering at the edge of this wall in the ocean- this magnificent physical creation and this big- I forget what it was- sea turtle went by- massive big thing- and I remember the dive master- I think- not that I don't pay attention to my diving gages- I knew we were deep – and I thought we were at about 90 feet and we were over 100 feet- he pointed to his dive gage and my eyes were like "Wow" – that's max dive- I think 130 feet is max depth now- so it was this major accomplishment- it was that just hanging there- that special connection with him and that special shared moment that neither one of us will forget and then the nature that was swimming by- I was just sort of caught up in it- like "Wow" - I don't believe this- look at that thing and here I am at 100 feet- so that's my first story.

The second story is related again too we had intentionally a group of us decided to dive off Gaspe in the North part of Québec, a 12-hour drive off from Gatineau- long drive. We drove up there to go diving off Bonaventure Island. Last day there, the whole intention of going there was we were going to see the seals, dive with the seals because there's seals there and they swim around you they stay with you- they know you're there – they're very cheery. You want to see a seal- you've come all this way you want to see a seal right!! And so I'll never forget – I thought I had given up- I'm not going to see a seal on this trip [laughs]- not going to see any seals. I've seen them above the water sitting there smiling at me teasing me- but I'll never see one under the water- because everyone else had seen one under the water except for me and the joke was I was just very calm-just float- and just chill- sure enough the last 3-4 minutes of the dive a Seal comes by- I was diving with a group of other people and this one diver had a camera and he took a picture and my eyes just bulged and the seal just swam right by me- and they're so fast- so beautiful to watch and my hand was out- and you can see in this picture- I wanted to reach the seal and he just went by and I thought "I saw a seal" so for me that was a great moment. Seeing the marine life, having that photo my eyes are just bugged right out and it's not fear- it's just that I was looking at this seal- they're pretty timid. So I thought it was pretty cool and they just sit and they bask on the rocks above the water and they taunt you- they're very teasing and then you see them so it's quite a thrill to see them in the water. They swim by you and they're just- yeah- if I could come back I think I'd come back as a seal- just lie there in the sun and zoom around in the water!!

Existential Blue Mermaid-

	Quotes from Transcript
Lived Body	<p>p. 2 “ I think it was just curiosity right and thinking well hey- I’m a good swimmer- I’ll be comfortable in the water. And sure enough just throw me in the water and I’m as good as a fish- literally” (BODY/SPACE)</p> <p>p. 3 “ when I walk I do use my leg and I use a cane for balance and speed. Once I get going I have momentum- where as in the water well I don’t need anything too lean on and that freedom of not having an artificial leg it’s great. I have a swim leg- but I only use it when I go to the beach or on a boat for stability- but that thing comes off and I’m happy to be free of it.” (BODY/SPACE)</p> <p>p. 4 “It feels good- neutral buoyancy- that’s where you’re not going up or down- you’re actually floating... I’ve learned through my advanced course to really master that... I’ve had people say wow-you’re really comfortable in the water with your buoyancy” (BODY)</p> <p>p. 4 “ you hear your own breathing- you’re conscious of your breathing and you’re hearing your breathing and you become almost in tune with your breathing- you hear your regulator- Shhhh Phoooooo- there’s something hypnotic about your breathing.” (BODY)</p> <p>p. 7 “ floating- the buoyancy- I don’t know there’s something- it is effortless... I learned this last year I got very good instruction from a dive master of mine on how to save energy because I was moving my one leg like mad and wasting all this energy- I’m trying to master my movement and conserve energy because I use a lot of energy gearing up and by the time I’m in the water I’m exhausted” (BODY)</p> <p>p. 8 “ After a dive I always feel great! Very happy- very elated- very pleased” (BODY)</p>
Lived Space	<p>p. 1 “ my parents saw a comfort level there was swimming. I went to various camps and was always in the water there ... they kind of threw me into swimming lessons- literally and into the pool and I just took to it..... swimming has always been a big part of my life. I swam at Easter Seals camps” (SPACE)</p> <p>p. 1 “ I’ve come back to athletics in the last couple of years- mostly for health and stress reduction and just the water calms me” (SPACE)</p> <p>p. 1 “ it’s an outlet for me to relieve stress when you’re raising two teenage boys on your own and just work stress- it’s huge right- swimming and scuba – whatever that water it soothe me.” (SPACE)</p> <p>p. 2 “ In-on- or near the water- it’s my motto. So in the water swimming- snorkelling, on the water- I’ve tried sailing but it was too blah... it’s just love of water.” (SPACE)</p> <p>p. 3 “My goals are to enjoy it and see places and be in the water in beautiful places with warm water- just to see the beauty and the marine life in water” (SPACE)</p> <p>p. 3 “On land- master is an issue- I’m not going to play tennis- I mean I could but it’s going to be pretty bad and I’m going to get frustrated so mastery is difficult especially in sports that require running and mobility... walking it’s more of an effort... it’s not pleasurable.... I’ve done a number of things and to be honest the mastery thing just comes easier for me in the water than on land.” (SPACE)</p> <p>p. 4 “ It was in the Bahamas in 1988- beautiful weather. It would have been very hot- it was August, the water was gorgeous and the ocean was blue- the Caribbean air and Caribbean sea. The clarity of the water- you could see the bottom and everywhere.... Getting in you’re not in a pool- truly open water... it’s different than a pool” (SPACE)</p> <p>p. 4 “ It’s also quiet you know what- quiet- all you hear is the water- LWUP- LWUP or whatever the sounds are- it’s not like there’s music blasting” (SPACE)</p> <p>p. 7 “ the thing with diving and how different it is from swimming is that I shouldn’t be splashing about in the water creating all kinds of stuff- it forces me to slow down where as swimming I can rip up a pool and it’s different- right” (SPACE/TIME)</p> <p>p. 8 “ the pool- having that security of 4 walls around you and that clarity and having your instructor a few feet away....when you’re in an ocean you don’t have that safe environment and 4 walls around you and that safe environment and you don’t have the visibility and it’s wild and there’s things swimming around and it can be choppy- you’re dealing with the weather...” (SPACE)</p> <p>p. 11 “ Facebook- divers can communicate on facebook and say where they’re going to be diving” (SPACE/RELATION)</p>

Lived Time	<p>p. 7 “ the thing with diving and how different it is from swimming is that I shouldn’t be splashing about in the water creating all kinds of stuff- it forces me to slow down where as swimming I can rip up a pool and it’s different- right” (SPACE/TIME)</p>
Lived Relation	<p>p. 1 “ Part of swimming and diving for me is I’m trying to get the youngest one involved in it, being a role model and having a hobby they think is cool.” (RELATION)</p> <p>p. 2 “ I started diving- I did my first dive on my honeymoon with my husband.... So we went to the Bahamas and took resort course in the pool and it just happened that the guy who trained me he had trained other people with disabilities.” (RELATION)</p> <p>p. 2 “Back in Ontario we were trying to find someone to dive with and I found a group out of Oakville – it’s not around anymore called Club Challenge- I called the dive master and we’re still in touch today!” (RELATION)</p> <p>p.3 “The connection with your buddy and listening to the dive master- people are very helpful.” (RELATION)</p> <p>p. 5 “ I’m definitely focused on eye contact and facial contact with my buddy. I’m more aware of my buddy and making sure they’re okay and making sure I’m okay. We did a dive last summer and it was eye to eye contact all the way down.” (RELATION)</p> <p>p. 5 “ there’s a lot of social connection and interaction and primarily though focused on helping each other gear up- make sure you’re okay- making sure you’re doing what you’ve got to do- helping other people do up the zipper on their wetsuit... even with able-bodied divers... they’re all helping each other so they don’t mind helping me.” (RELATION)</p> <p>p. 9 “ I think they can be a little hard on themselves- they make or break you in any sport- by supporting you when you struggle to learn a new skill, their words, they’re cheerleaders in so many ways and it’s the safety aspect of it too- don’t worry- I’m here with you- I wouldn’t let you if you weren’t ready.” (RELATION)</p> <p>p. 9 “It’s nice to be around people who are similar in initiative and interest- people who are trained and willing to work with our own unique needs- it’s good in so many ways to have that camaraderie, that friendship- that support that you know... it’s a common culture, common values, some of the people I’ve met with disabilities who dive I have stayed in touch with for a long time.” (RELATION)</p> <p>p. 10 “it’s great- the impact its had on my life: friendship, mastery of sport- travel places some people will never see, marine life some people will never experience, freedom in the water- something that carries over into your life.. it’s something I hope to share with my teenage boys.” (RELATION)</p> <p>p. 12 “Diving it’s not for everybody- I think the reason I got into it was the group Club Challenge they helped offset the cost- which is a huge barrier to participation for people with disabilities- so they lent you equipment and they helped offset the cost of the trip and the reduced the cost of certification recognizing that cost is a barrier not just for able-bodied but for individuals with disabilities who might be on limited incomes. I think another issue is access to transportation- you need a car and someone who will get you to where you’re going or go with you- or buddy up wit you... some people with disabilities are lonely so diving might be a solution.” (RELATION)</p> <p>p. 12 “ I think there are a lot of people with disabilities who get certified and unless they have a partner or really close friends then they find it’s difficult even when they dive with a club someone has to step up and say “I’ll be your buddy”- I know I’ve personally felt that I don’t want to be a burden-so having a close friend who’s willing to get into that with you- that’s good.” (RELATION)</p>

Keywords: Blue Mermaid

Keyword	Quotations/ Location in Transcript
Comfort	<p>p. 1 “my parents saw a comfort level.... I went to various camps and was always in the water there and I – they kind of threw me into swimming lessons- literally and into the pool and I just too to it... swimming has been a big part of my life” (BODY/SPACE)</p> <p>p. 2 “ It was just curiosity right and thinking well hey- I’m a good swimmer- I’ll be comfortable in the water. And sure enough just throw me in the water and I’m as good as a fish- literally” (BODY/SPACE)</p> <p>p. 4 “ I guess deep down I really do enjoy nature- whether it’s on land or sea- but being in the water I’m comfortable and just seeing the fish and the color” (SPACE/BODY/RELATION)</p> <p>p. 4 “I’ve had people and able-bodied divers say to me wow- you’re really comfortable in the water with your buoyancy- but it’s with practice and comfort in the water” (BODY/SPACE/RELATION)</p> <p>p. 8 “ In a pool having that security of 4 walls around you and that clarity and having your instructor a few feet away, when you’re in an ocean you don’t have that safe environment and 4 walls around you....you don’t have the same visibility and there’s thing swimming around you” (SPACE/RELATION)</p> <p>p. 1 “when you’re raising two teenage kids on your own and or just work stress it’s huge right- swimming, scuba, whatever that water it soothes me” (SPACE)</p> <p>p. 4 “ it’s also quiet you know- quiet, all you hear is the water- LWUP-LWUP-LWUP or whatever the sounds are- I like them you know it’s not like there’s music blasting..... you hear your own breathing- actually you know you’re conscious of your breathing and you’re hearing your breathing and you become almost in tune with your breathing- you hear your regulator- Shhhh Phooooooo- there’s something almost hypnotic about your breathing.” (SPACE/BODY)</p> <p>p. 7 “ The thing with diving and how different it is from swimming is that I shouldn’t be splashing about in the water creating all kinds of stuff- it forces me to slow down where as swimming I can rip up a pool and it’s different right- so that’s the biggest challenge for me.” (SPACE/BODY/ TIME)</p> <p>p. 8 “ after a dive I always feel great! Most dives very happy, very elated, very pleased very – did you see that kind of thing, very WOOO HOO and that sort of anxiety, you put that anxiety to bed and now I remember why I came to Flórida in the first place.” (SPACE/BODY)</p> <p>p. 8 “I think the first dive of the year or the first dive¹ anytime anywhere you’re not nervous but you’re not relaxed for sure the same way you are by the 6th dive of the trip or the 5th dive of the summer- you feel a bit rough around the edges.” (SPACE/BODY/RELATION)</p>
Freedom	<p>p. 3 “ in the water well I don’t need a cane and I don’t need anything to lean on and that freedom of not having an artificial leg it’s great. I have a swim leg but I only use it to get onto the beach or be on a boat for stability- but that thing comes off and I’m happy to be free of it” (BODY/SPACE)</p> <p>p. 10 “ freedom in the water- something that carries over into your life...” (BODY/SPACE)</p>

Equality	<p>p. 7 “alright- I use pretty much everything everyone else does except this year because I did some diving in Ontario I have a modified, adapted, custom fitted wetsuit that doesn't have two legs” (RELATION)</p> <p>p. 5 “there's a lot of social connection and interaction and primarily focused on helping each other gear up- make sure you're okay- making sure you're doing what you've got to do- helping other people you know do up the zipper on their wetsuits.... Even with able-bodied divers... they're all helping each other- they don't mind helping me.” (RELATION)</p>
Socialize	<p>p. 1 “part of swimming and diving for me is I'm trying to get the youngest one involved in it- and again it's an outlet for me to relieve stress when you're raising two teenage kids on your own.” (RELATION)</p> <p>p. 2 “when I came back to Ontario we were trying to find someone to dive with and I found a group out of Oakville ... called Club Challenge... they offset the cost and provided equipment.” (SPACE/RELATION)</p> <p>p. 2 “they insisted that we bring a buddy” (RELATION)</p> <p>p. 4 “the connection with your buddy and listening to the dive master... people are very helpful” (RELATION/SPACE)</p> <p>p. 4 “you hear your own breathing- you're conscious of your breathing and you're hearing your breathing and you become almost in tune with your breathing- you hear your regulator Shhhhh Phooooooo- there's something almost hypnotic about our breathing” (SPACE/RELATION)</p> <p>p. 5 “I'm definitely focused on eye contact and facial contact with my buddy.... I'm more aware of my buddy and making sure they're okay and making sure I'm okay..... it was eye to eye contact all the way down” (SPACE/RELATION)</p> <p>p. 5 “There's a social connection and interaction and primarily focused on helping each other gear up- making sure you're okay- making sure doing what you've got to do- helping other people you know do up the zipper on their wetsuit” (RELATION)</p> <p>p. 9 “they can be a little hard on themselves....they make or break you in any sport... by supporting you when you struggle to learn a new skill... by their words.... They're cheerleaders in so many ways and it's the safety aspect too- don't worry, I'm here- I wouldn't let you do this if you weren't ready” (RELATION)</p> <p>p. 9 “it's nice to be around people who are similar in initiative and in interest and then to have those people who are trained and willing to work with your unique needs.... It's good in so many ways to have that camaraderie- that friendship , that support..... it's a common culture, common values and some of the people I've met with disabilities who dive I have stayed in touch with for a long long time” (RELATION)</p> <p>p. 10 “it's great- the impact its had on my life: friendship, master of a sport, travel, places some people will never experience..... it's something I hope to share with my teenage boys” (RELATION)</p> <p>p. 11 “I went out and got involved in the local diver's association and hear about them through my dive instructor, facebook- divers can communicate on facebook and say where they're going to be diving...” (SPACE/RELATION)</p> <p>p. 12 “I know I've personally felt that I don't want to be a burden- I have to caution them when I go out with them – so having that close friend who's willing to get into that with you- that's good.... I've seen a lot of people after the fact languishing- well who's gong to dive with me?” (RELATION)</p> <p>LE “he pointed to his dive gage and my eyes were like wow- that's max dive depth- so it was a major accomplishment- it was that just hanging there- that special connection with</p>

	him and that special shared moment that neither one of us will forget.” (SPACE/RELATION)
<i>Neutral Buoyancy</i>	<p>p. 4 “ it feels good- neutral buoyancy right- that’s where you’re not going up or going down- you’re actually floating- I think it’s that feeling for anybody that’s wild.... I’ve had people and able-bodied divers say to me wow- you’re really comfortable in the water with your buoyancy- but it’s with practice and comfort in the water” (BODY/SPACE/RELATION)</p> <p>p. 7 “ floating- the buoyancy.... It is effortless” (BODY/SPACE)</p>

APPENDIX H OVERALL KEYWORD SUMMARY TABLE

Keywords Summary Table:

Keyword	Scuba	Existentials	Swimming	Existentials
<i>Comfort</i>	Pinky Squishy Blue Mermaid	Body Space Relation	Tina B-rod IDC Dora Rock Star Bob	Body Space Relation
<i>Equality</i>	Pinky BB Blue Mermaid Sunshine Chair	Space Relation	Rock Star Tina B-rod Dora Bob	Space Relation
<i>Freedom</i>	Squishy Blue Mermaid Sunshine Chair Rock Star	Body Space Relation	Rock Star Smiley Tina Dora Bob	Body Space
<i>Accomplishment/Achievement</i>	Pinky BB Chair	Space Relation	Tina IDC Dora Bob	Body Relation
<i>Socialize</i>	Pinky Blue Mermaid Sunshine	Space Relation	B-rod Missy	Space Relation
<i>Physical Exertion / Effortless</i>	Chair	Body Space Time	Rock Star Smiley B-rod Dora Bob Missy	Body Space Time
<i>Fun</i>	N/A	N/A	Smiley Missy	Space Relation
<i>Buoyant/ weightless</i>	Pinky Squishy BB Blue Mermaid Chair Rock Star	Body Space Time	Rock Star Dora 1	Body Space
<i>Explore</i>	Pinky Squishy BB Sunshine Char	Body Space Time Relation	N/A	N/A

APPENDIX I OVERALL LIVED EXPERIENCE / LIFE WORLD SUMMARY TABLES

Swimmer Existential Summary Table

Participant	Lived Body	Lived Space	Lived Time	Lived Relation
Rock star	Sensory information used to navigate in water (p1) Physical activity increasing fitness and strength (p. 2, 3,4) Connect to body/ self in positive way carries over to other forms of physical activity (p 5)	Belong/Included (p2) Freedom compared to other venues for physical activity (p2) Auditory cues naturally present in space (p3) Compete with other Blind athletes, equal grounds for competition (p4, LE)	Practices longer Meet a faster pace, working harder (p4)	Typically must adapt/change all activities (p1) Don't feel included on land, freedom to participate in water, same experience as others in water (p2) Part of a team Make friends through team (p3)
Smiley	Relaxing while in water, may be influenced by temperature (p6) Easier to move (p6) More mobility, Freedom from mobility aids (p5) Doesn't kick in backstroke, arms only (p15/LE)	Always enjoy time in water (p3) Able to do more in the water than on land (p5) When used legs and arms in backstroke get stuck on wall/lane ropes (p15/LE)	Doing lengths/same thing gets boring (p.5)	Whole family enjoys activity (p1) Shared interest with sister, but in different lanes (p14)
Bob	Instinct now to use body in all forms of physical activity (p1) Not severe, only missing hands- not legs (p3) Moving in water feels same as anyone else (p3) Good swim feels effortless to move (p5) Reduced influence of gravity and freedom in water appeal for others with sever disabilities(p6)	Tried many sports, swimming was a good fit (p1) Opportunity to compete with other disabled athletes (LE) Reduced influence of gravity and freedom in water appeal for others with sever disabilities(p6) Slower to move, provides feedback about movement immediately (p6)	Feels slower to move in water than on land & provides immediate feedback about movement (p6)	Opportunity to compete with other disabled athletes at elite level (p1) Coaching SWADS requires different coaching approach (p6) During race alone/ focus on goals for race (LE)
Missy	Muscles tighter on land than in water (p1) Relaxation while in water (p3) Tired from exercise in drills and strokes (p4)	Harder/more effort on land, easier in water(p1) Interest/Curiosity in different settings, water just one of those spaces of interest (p3) Busier in practice than in home pool (p3)	Snowboarding an all day activity, swimming a 2 hour activity but still get same degree of physical exertion (p2)	Initial interest to join because friends were on team (p1) Shared interest with sister (p3) Opportunity to be on a team, have fun with others (p4) Expanded social circle (p4) Interaction with trained coach (p4)

Diver Existential Summary Table

Participant	Lived Body	Lived Space	Lived Time	Lived Relation
Blue Mermaid	Freedom to move without mobility aids/artificial leg (p3) Buoyancy/floating a comfortable experience for body (p4, 7) Breathing from conscious to sub-conscious activity once adjust to using regulator (p4)	Comfort around water, began with back yard pool/segregated camps, to integrated swim team to diving (p1, 2) Mastery a challenge on land, easier to move in water (p3) Don't need any mobility aids in water/ Freedom (p3) Pool safe, confined (p8) Open water around nature, quiet, temperature fluctuates depending on weather and location (p8) Facebook a way to communicate plans, arrange for buddy (p11)	Swimming goal to move fast/ big splashes, diving a slower paced activity (p7)	Role Model for Sons (active lifestyle) (p1, 10) Shared experience with buddy (ex-husband), Dive culture (p2, 9) Club Challenge a non-profit group helped offset cost of training, equipment, trips (p2) Connection with buddy (p5) Help each other gear up (p5) Life-long friendship (p10)
Chair	Learning how to use equipment/ breath from conscious to unconscious (p1) Freedom from disabled body in sense can't tell by appearance that he is disabled (p3, 4, 6, 8) Easier to move, more choice in how to move under water (p3, 4)	New world/ New environment unlike on land (p3) Freedom from disabled body in sense can't tell by appearance that he is disabled (p 3, 4, 6, 8) Easier to move (p4) Weightless/ floating (p 8)	Time slows when under water for a dive, not in a hurry or racing (p4) Wish could stay down longer, only able to dive safely a specific amount of time before must return to surface (p8)	Instructor offered services/ course for free (p1) No one can tell has a disability when diving/ in water- he fits in with all the other divers (p4) Shared experience with his wife Talk about dive, write what saw in dive down (p8)
BB	No control of own bodily movements on land, able to change positions in water (p 1, 3) Buoyancy by controlling bodily functions (breathing) (p2) Deeper dives require less effort (p4, 5)	Travel to different locations for dives and experience different world (p2) Buoyancy control key to experience under water (p2, 3) Increased mobility when in current (p2) Visibility varies depending on location (p4) Deeper dives require less effort (p5) Not an environment everyone will get to experience (p5)	Deeper dives are shorter dives as depth of dive will influence duration of dive (p5)	Help is necessary for every activity on land or in water (p1) Communication key (p2, 3) New world not everyone will have opportunity to experience/explore (p 5, 6) Common experience that yields unique stories to share (p6)
Rock Star	While under water a relaxing feeling to glide through the water (p5)	Explore under water surface, feel along the bottom (p 5) Freedom, not worrying about falling (p5)	Able to spend more time under water than in swimming (p5)	N/A

Lived Experience Description Summary Table

<i>Name</i>	<i>Summary Lived Experience Description</i>	<i>Existential</i>
<i>Bob</i>	Paralympic Trials in Montreal (1 st big meet)	Relation
<i>Rock Star</i>	Provincial Paralympic Winter Championships, all SWAD meet, knows medal a “real” medal	Relation
<i>Marge</i>	First swim meet on team at home pool	Space
<i>Smiley</i>	Swimming 25 m back in first meet	Body
<i>Dora</i>	Smiley swimming 25 m back in first swim meet	Body
<i>IDC</i>	Peers at school teasing Missy, change attitude once hear about all activities she does	Relation
<i>B-rod</i>	Training with Bob during a really hard set in practice	Space/ Relation
<i>Tina</i>	Difference in Bob since attending first big Can-Am meet, all SWAD meet and swam all personal bests	Relation
<i>Pinky</i>	During training to be instructor experience all disabilities, blind dive in Georgian bay, sensory experience of underwater world	Body/Space
<i>Squishy</i>	Teaching paraplegic to dive, became difficult for him to learn how to use body under water- a major learning curve but now trained and now experiences freedom to explore	Body/Space
<i>Sunshine</i>	Diving during rain storm, underwater couldn’t tell was miserable weather, diving gets anyone away from the world	Space
<i>Blue Mermaid</i>	Dive in Caribbean, seeing marine life there, Dive in Canada with seals	Space
<i>BB</i>	Dive in Bonaire, one of first Quads to dive in integrated group, at first remainder of group kept distance, but soon realized he was skilled diver by end of first dive	Relation
<i>Chair</i>	After dive, come up and see naked divers along shore line as many don’t wear anything under wetsuits but want to get out of cold clothing after a dive	Space/Relation

Swimmers Overall Existential Summary Table:

Body	Space	Relation	Time
Ease of Movement		Accomplishment	Pace
<ul style="list-style-type: none"> Freedom from mobility aids (Smiley, Dora, Rock Star, Tina) Reduced influence of gravity (Bob) Relaxation (Missy, Smiley, Rock Star) Comfort (Dora) Difference between exertion on land vs. water (Smiley, Missy) 		<ul style="list-style-type: none"> Some able bodied individuals will never learn, remain uncomfortable in the water (Dora, IDC) 	<ul style="list-style-type: none"> Practice is long and boring, improved technique at slower pace (Rock Star, Smiley, Dora) Faster pace, speed key, body exerts more effort in short period of time (Smiley, Rock Star)
Control	On par / Equality		Feedback
<ul style="list-style-type: none"> Strength & Fitness (Rock Star, Missy, IDC, Dora) Sensory cues / Kinesthetic Awareness facilitated (Rock Star, Bob, B-Rod) Diverse of levels of skill (B-Rod) Flexibility in movement (Dora, Tina, Smiley) 	<ul style="list-style-type: none"> Inclusive environment (Dora, B-Rod) Segregated vs. Integrated (Rock Star, Bob, B-Rod, Tina) Same experience as other participants (Rock Star, Dora, Tina) Participate in family interest (Dora, Smiley) Compete with other SWADS (Bob) 		<ul style="list-style-type: none"> Immediate kinesthetic feedback (Rock Star, Bob, B-Rod)
Sensory Feedback	Aquatic Environment	Team Culture	
<ul style="list-style-type: none"> Immediate kinesthetic feedback (Rock Star, Bob, B-Rod) 	<ul style="list-style-type: none"> Replace therapy session (Tina) 	<ul style="list-style-type: none"> Part of a team (Rock Star, Missy, B-Rod, IDC, Tina) Shared interest with sibling (Missy, Smiley, Dora, IDC, Tina) 	

Divers Overall Existential Summary Table:

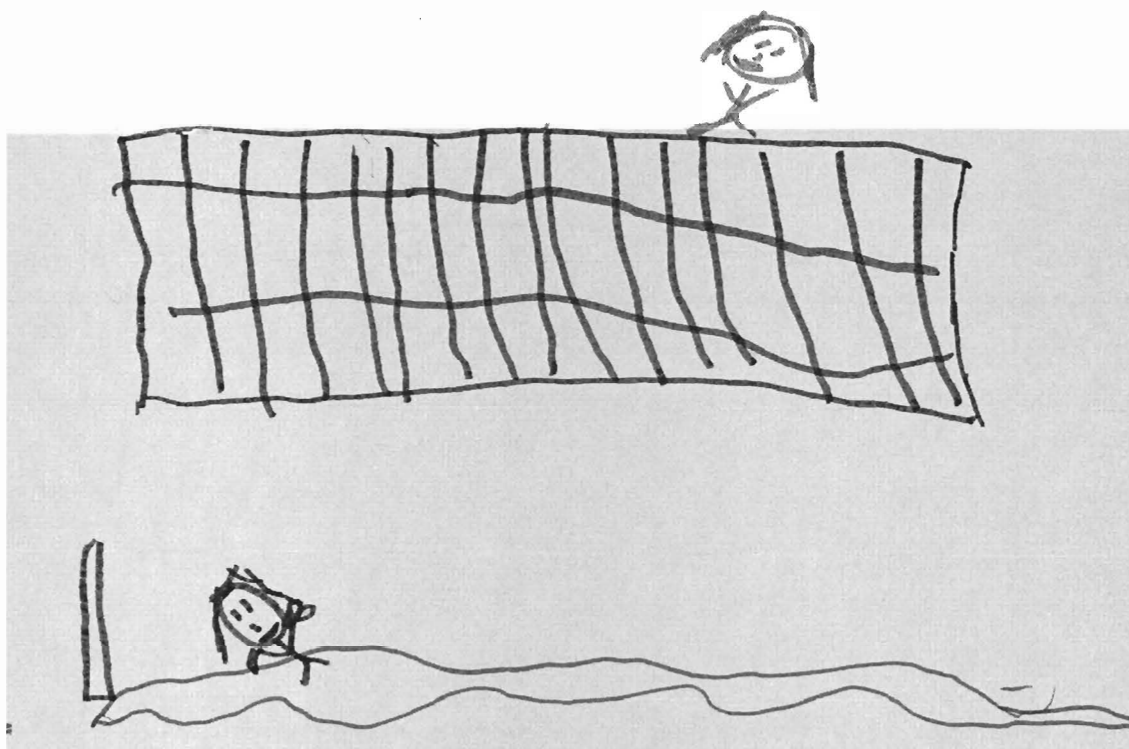
Body	Space	Relation	Time
Ease of Movement		Dive Culture	Re-storying
<ul style="list-style-type: none"> Size of movement (BB, Chair, Squishy) Freedom from mobility aids (Blue Mermaid, Squishy, Sunshine) Depth influences effort needed to move (BB) Changing positions / moving in different ways (BB, Sunshine, Chair) 		<ul style="list-style-type: none"> Ongoing relationship between instructor and diver (Squishy, Blue Mermaid) Share stories / narratives of experiences (BB, Chair, Sunshine, Blue Mermaid) Trust / Safety in hands of others (BB, Sunshine) 	<ul style="list-style-type: none"> Return to activity they used to enjoy before accident (Squishy)
Control	On par / Equality		Pace
<ul style="list-style-type: none"> Must learn to move and relate to body once in equipment (Squishy, Sunshine, Pinky) Using regulator breathing goes from conscious to unconscious (Blue Mermaid, Chair, BB, Pinky) Learn to control buoyancy (All informants) 	<ul style="list-style-type: none"> Same training and rules for all (Pinky, Chair, Blue Mermaid) In the water can't visibly pick diver with disability out from group (Chair, Squishy, Pinky) 		<ul style="list-style-type: none"> Slower, goal to explore and observe not to race (Blue Mermaid, Chair) Actual dive time limited, social experience draws out to half day activity (Sunshine)
	Explore / A new world	Barriers	
	<ul style="list-style-type: none"> Underwater world environment few get to explore (Chair, BB, Rock Star, Squishy, Sunshine, Pinky) 	<ul style="list-style-type: none"> Economic / financial to be trained, purchase equipment, travel (Blue Mermaid, Sunshine, Chair) Need for dive buddy (Blue Mermaid, BB) 	
	Aquatic Environment	<ul style="list-style-type: none"> Transportation (BB, Blue Mermaid) 	
	<ul style="list-style-type: none"> Pool vs. open water (All informants) 		

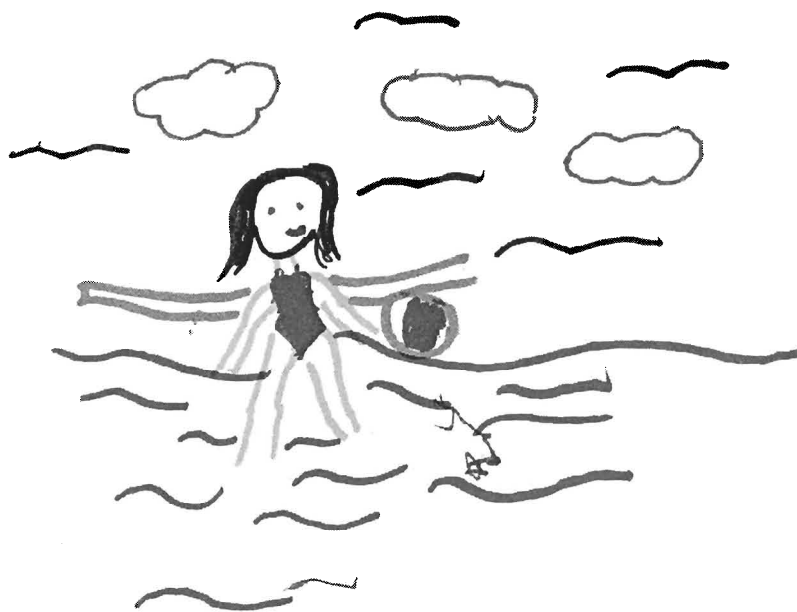
Overall Aquatic Activities Existential Summary Table:

Body	Space	Relation	Time
Ease of movement		Accomplishment	Pace
<ul style="list-style-type: none">Freedom from mobility aidsAbility to change positionsEffort of movement in water compared to physical activity on land		<ul style="list-style-type: none">Achievement to engage in activity in the aquatic environment, some individuals will never experienceCommon interest with significant others / family	<ul style="list-style-type: none">Slower pace to dive than in swimming, swimming goal to race
Control	On par / Equality		
<ul style="list-style-type: none">Learn to move with equipment on bodyLearn to move body through spaceKinesthetic awareness facilitated through immediate feedback	<ul style="list-style-type: none">While in the water unable to pick out individuals with disability from groupInclusive activity everyone has same experience subject to same rules and training		
	Swim vs. Dive Culture		
	<ul style="list-style-type: none">Dive culture group of individuals with diverse backgrounds all share passionDive community spans beyond single club organization or facilitySwim culture isolated to one club / activities affiliated with club		
	Aquatic Environment		
	<ul style="list-style-type: none">Depth influences effort needed to moveOpen water vs. indoor (context)Team vs. swim lesson (context)Easier to move in water than on landAlternative environment replacing medical / therapeutic session		

APPENDIX J
Visual Artifact and Keywords:

FUN

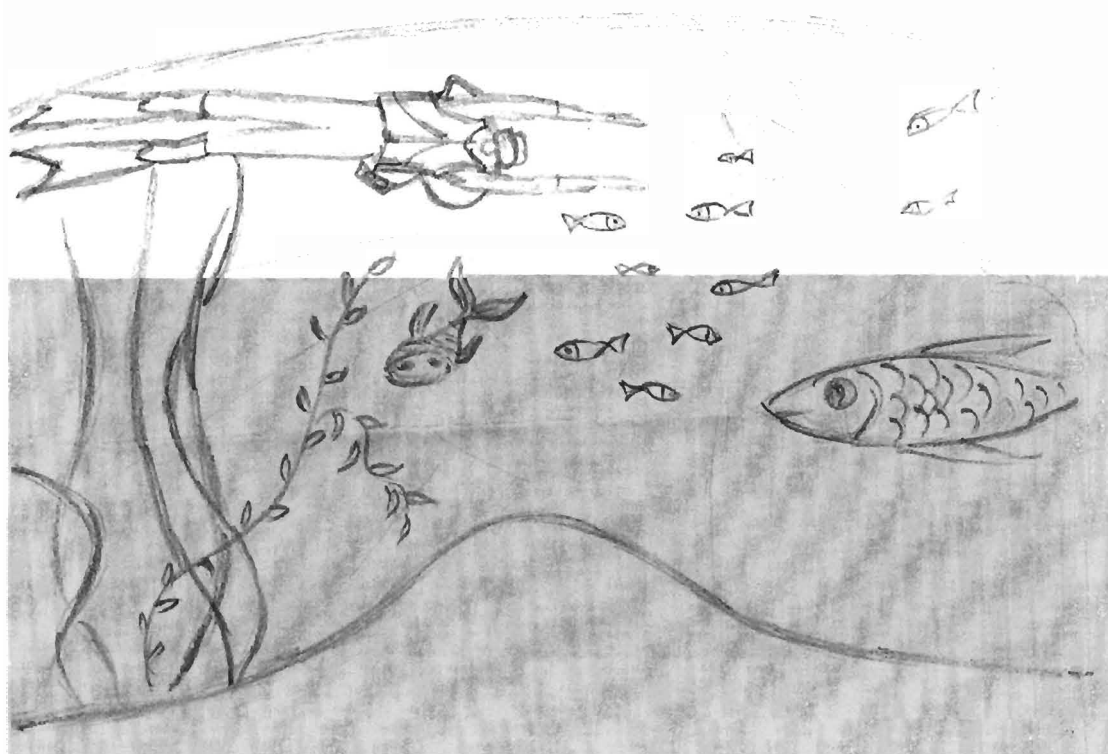


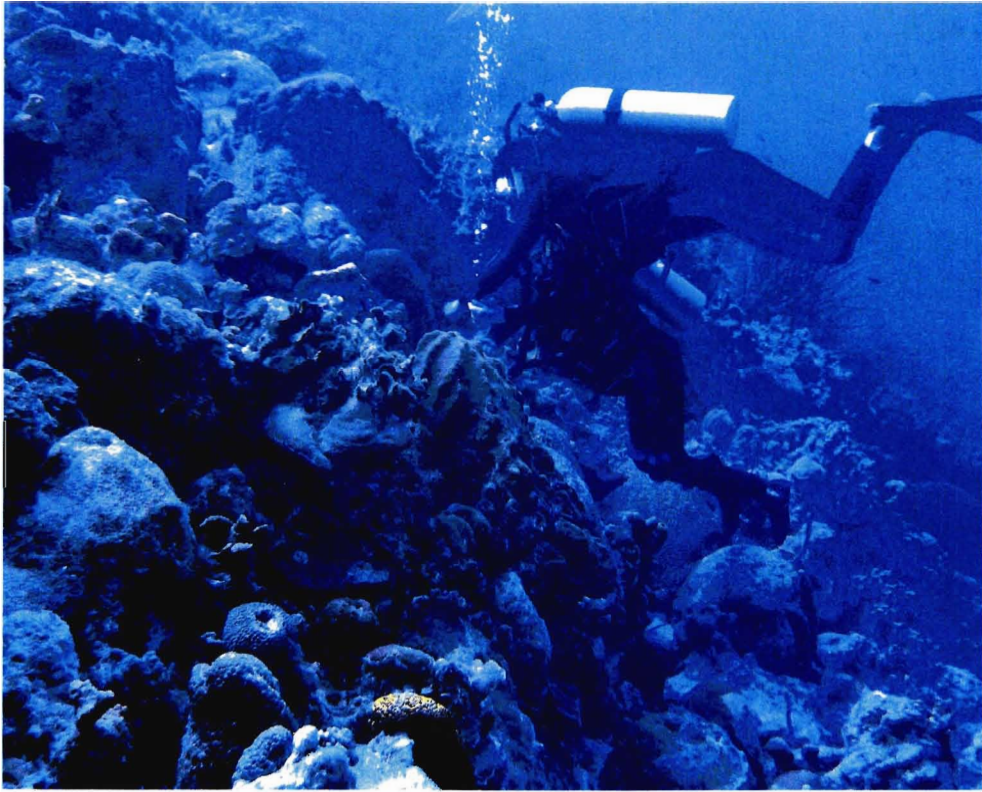




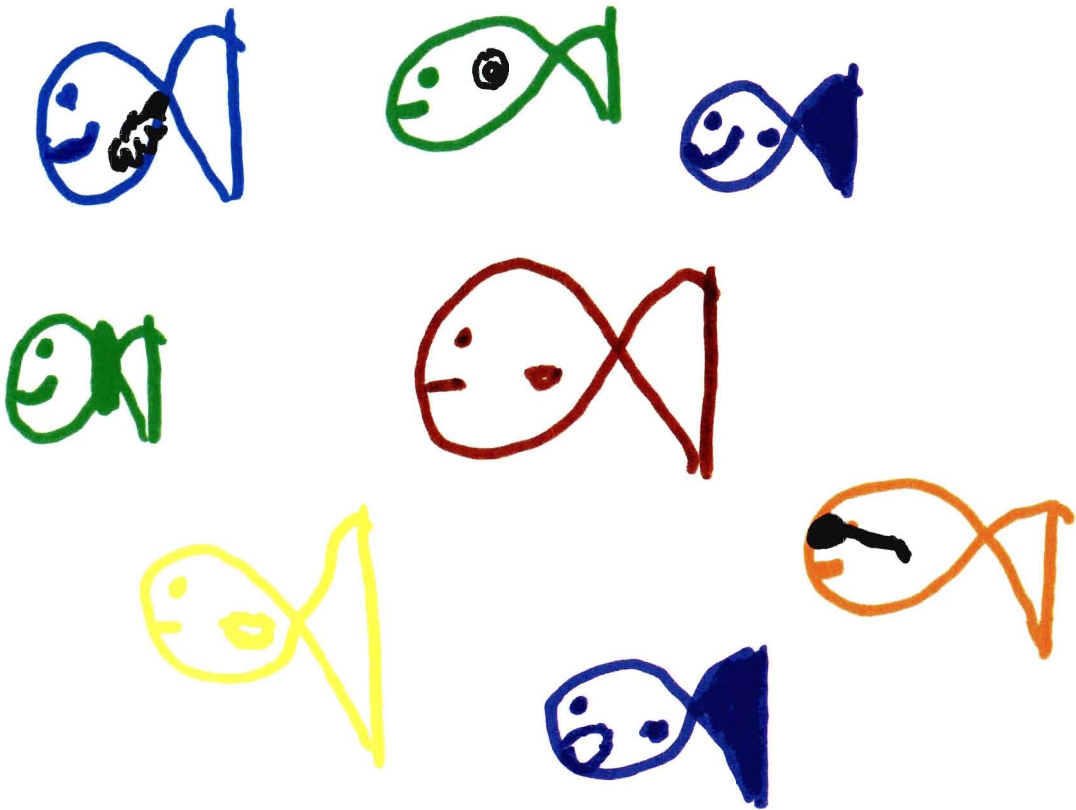
I FEEL HAPPY WHEN I AM SWIMMING

EXPLORE





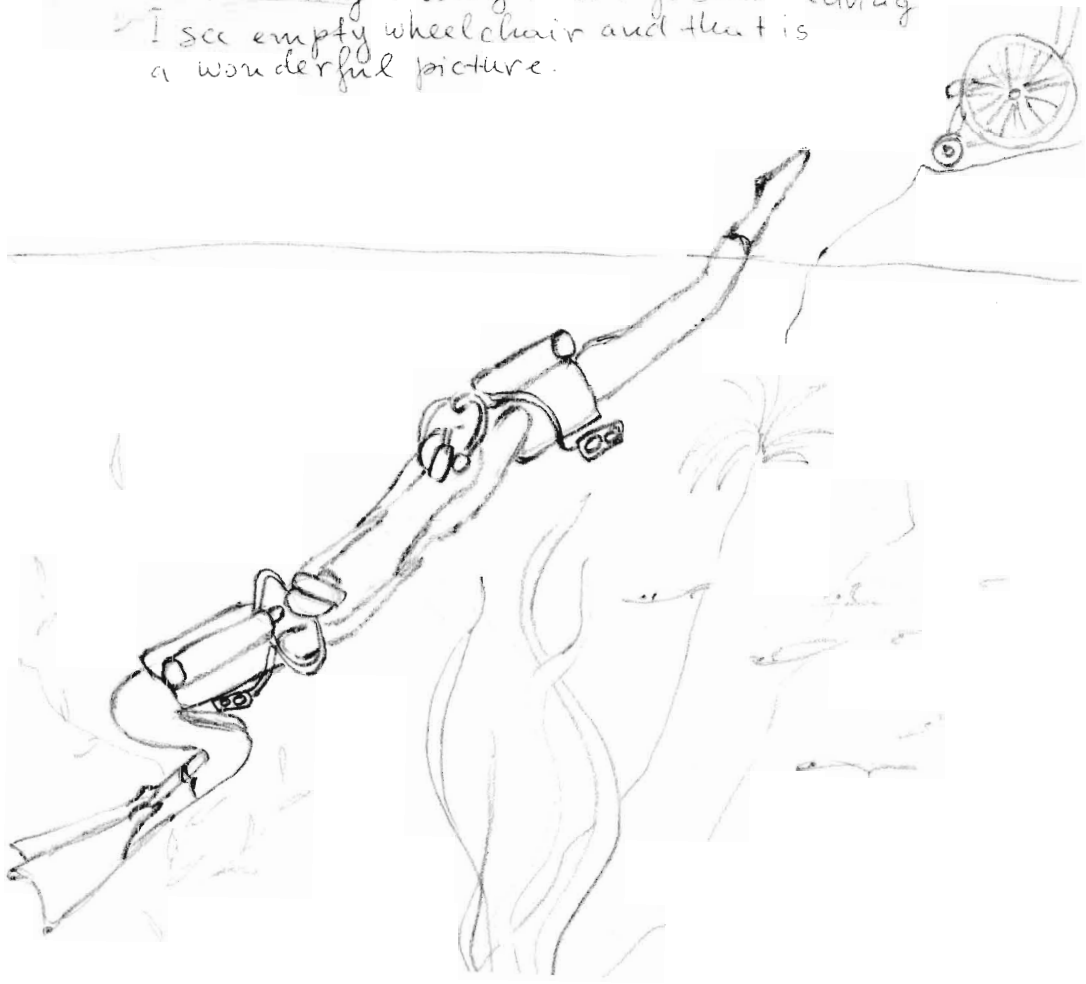
EQUALITY



FREEDOM



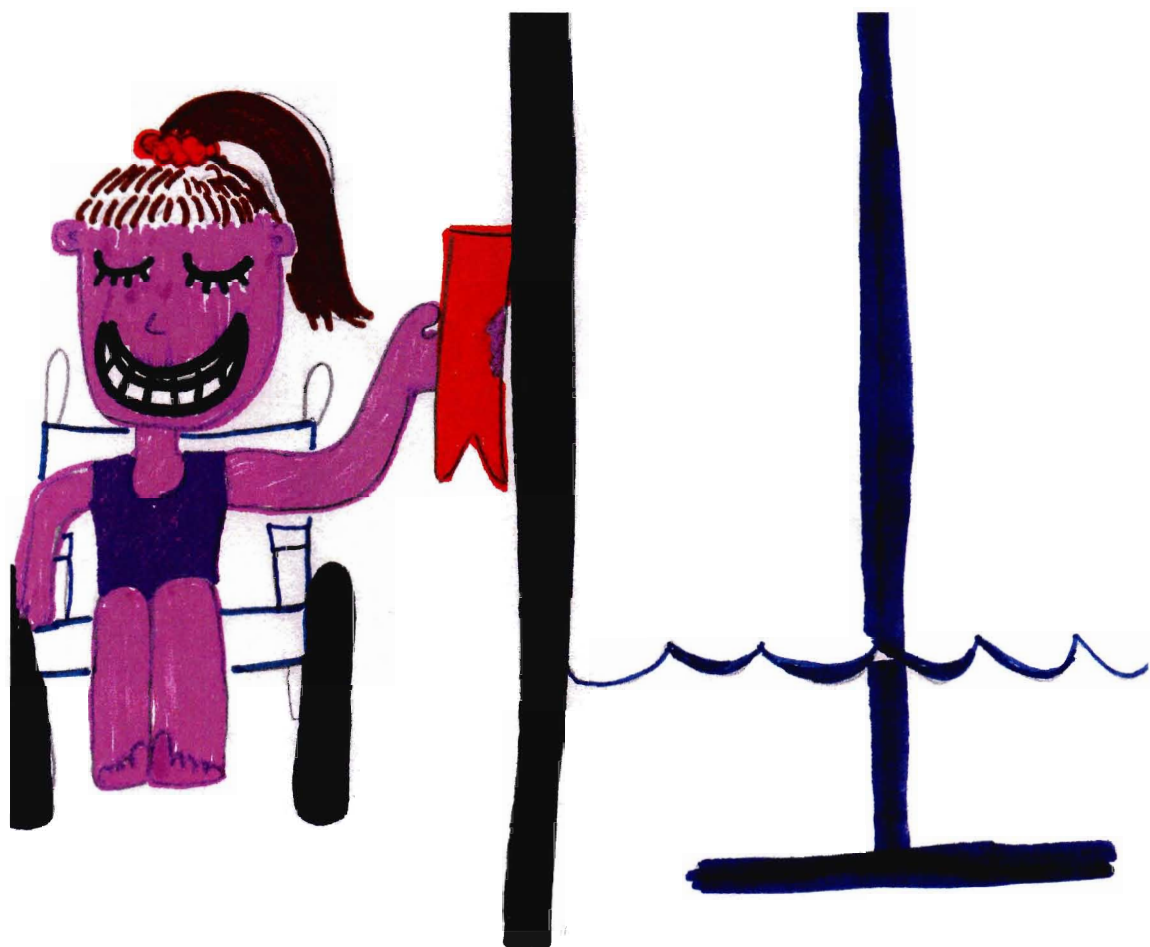
When my buddy and I go summer surfing
I see empty wheelchair and that is
a wonderful picture.

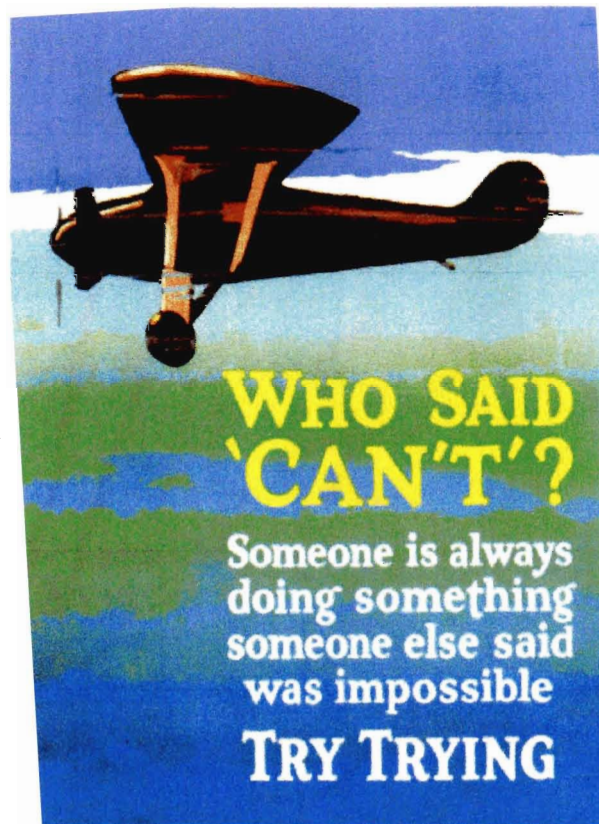




ACCOMPLISHMENT







**WHO SAID
'CAN'T'?**

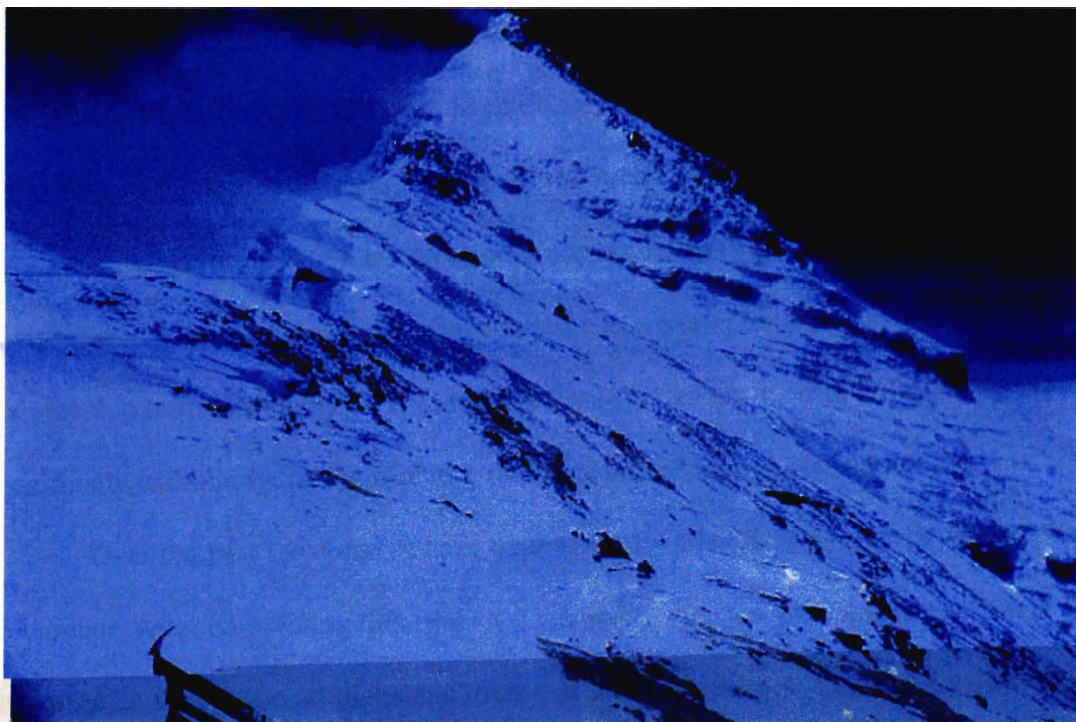
Someone is always
doing something
someone else said
was impossible

TRY TRYING



achievement

Triumph



APPENDIX K

CODA

The introduction to this document cited examples from my everyday activities that highlighted the disembodied modern lifestyle influencing Western cultural practices. Reflecting on the dramatic change in the role of my body's voice following my accident gave me a unique perspective on my experiences and observations in the aquatic environment as athlete and coach. Since I used these examples as the starting point to this document, a logical conclusion is to re-visit my experiences in completing this project, specifically examining the significance and meaning of this project on my life.

Over the past two years, I have experienced a great deal of growth as a qualitative researcher. After completing this project, I am aware that the textbooks are accurate when they explain the emotional highs and lows that are encountered. Luckily, I was blessed with several means of support. I was able to voice my frustration to my family and thesis supervisor as well as trade stories with my peers in the graduate student lounge.

Another source of comfort in this process was the experience of chronicling the highs and lows of the process in my reflexive journal. I made many of these entries as I rode the train home following the initial interviews as well as throughout the process of transcription. Reading the entries in my journal and reflecting on discussion with my peers allowed me to realize the extent of my connection with and passion to pursue my research questions.

When I first arrived at Brock to begin my Master's degree, one of the first decisions I made was to join the local Master's swim club and volunteer my time with an adapted swim program. Both decisions allowed the aquatic environment to play a significant part in shaping my experience at Brock. The convenience of having a pool on

campus that offers such diverse aquatic programming meant that I was able to fit volunteering and physical activity in this particular context into my lifestyle with ease. The pool provided haven away from stress of course work and deadlines.

My time in the pool with either program allowed time to fly by! As the first term ended I knew that it was important to select a thesis topic. In a series of conversations with my thesis supervisor one question began to emerge consistently. I was seeking to understand the meaning of physical activity in the aquatic environment in my own life and in the lives of others with physical disabilities. This question actually began incubating in my mind during my initial experiences in the water and continued to develop through my observations as a SWAD coach during my undergraduate degree. I soon began seeking out literature in adapted physical activity that led me to discover the lack of participants' voices in understanding the meaning of the aquatic environment.

Embarking on this project meant that I was able to address a question that has been on my mind since my accident. Acknowledging the influence of this question on my life has allowed me to arrive at an understanding of the significance of the aquatic environment in my own life, specifically answering why I am drawn to the water.

Writing the proposal for this project allowed me to explore the literature in disability studies, which brought my attention to a new academic discipline and meant I was exposed to the voices of several extraordinary authors. Taking the works of Toombs and Wendell as examples meant that I had found a discipline that welcomes the use of examples from my own experiences in my writing.

Examining the definition of disability and the theoretical models shaping this definition allowed me to understand the definition of disability as dynamic rather than

fixed. Exploring the definitions of disability allowed me to accept that I am indeed an individual with a disability. I accept that disability is a legitimate aspect of my identity. In reading Wendell, specifically the consequences of the cognitive authority of medicine I came to understand why I struggled to accept disability as a component of my identity.

Following my accident, my body and its physical symptoms presented medical professionals a great deal of frustration as it is an injury typically seen in the elderly, not in an adolescent. My body and its physiological state presented medical professionals a challenge as they were armed with few options and little experience in developing treatment for someone so young. Examining the influence of the medical model of disability has allowed me to understand my past interactions with medical professionals and has armed me with knowledge of alternative models of disability. This knowledge, specifically on who is the authority on the decisions that are made about my own body has allowed me to acknowledge that I am the expert on my body, that I can choose to listen to the suggestions made by medical professionals. I am empowered knowing that I am in a position where I can choose what I believe will be best for my own body.

One of the first steps in this research process was to develop the protocols used for data collection. I began this process with the protocol for the lived experience description, creating a written story about the highlight of my career as a swimmer attending the Ontario high school swimming championships. Writing this story allowed me to re-visit a significant experience in my life. Recalling this particular event provided some guidance in developing the questions for the interview guides.

As I created all of the data collection protocol for this project, Pilot work allowed me to test each instrument and make any necessary adjustments. Going back to visit my

former athletes to conduct my pilot work meant that I had the opportunity to hear about their experiences in the water, which is a topic I had never explored as their coach. Going back to ask these questions as a friend, not as a coach, allowed me to ask these questions without any formal authority allowing them to answer these questions.

One of my former athletes is no longer participating in the program. He attributed his loss of interest in swimming to the negative attitude of his coach which led to less than rewarding experiences in the water. Hearing about his experiences with the knowledge of the importance of physical activity in the lives of individuals with physical disabilities makes me interested in examining the training provided to SWAD coaches, as I have seen little growth in the resources that are available to coaches.

Through all of my volunteer and work experience, one thing I have always enjoyed is the opportunity to interact with other people. Taking on a qualitative project allowed me the opportunity to interact with participants associated with adapted swim and scuba programs. My interactions with informants from either program meant that I was able to hear about their experiences and using the information that they shared, hearing about their adventures in the aquatic environment. Exploring the experiences of individuals involved in adapted scuba provided me the opportunity to move beyond my comfort zone of swimming to explore other aspects of the realm of adapted aquatics.

Analysis of the transcripts of participants' statements regarding the impact of the integrated nature of either program led me to question my own views on the value of integrated programming. Participants in either form of aquatic activity seemed to thrive in integrated programs. Both programs serve as examples of programs that have implemented an integrated program with great success.

Interacting with participants in adapted scuba program, hearing about their experiences, and learning about the sport have allowed me to expand my interest in adapted aquatics. The sensory details informants associated with adapted scuba created such a vivid illustration in my mind that this project has inspired me to pursue my certification. I am excited to experience and explore the underwater world creating and sharing my own narratives of my adventures!